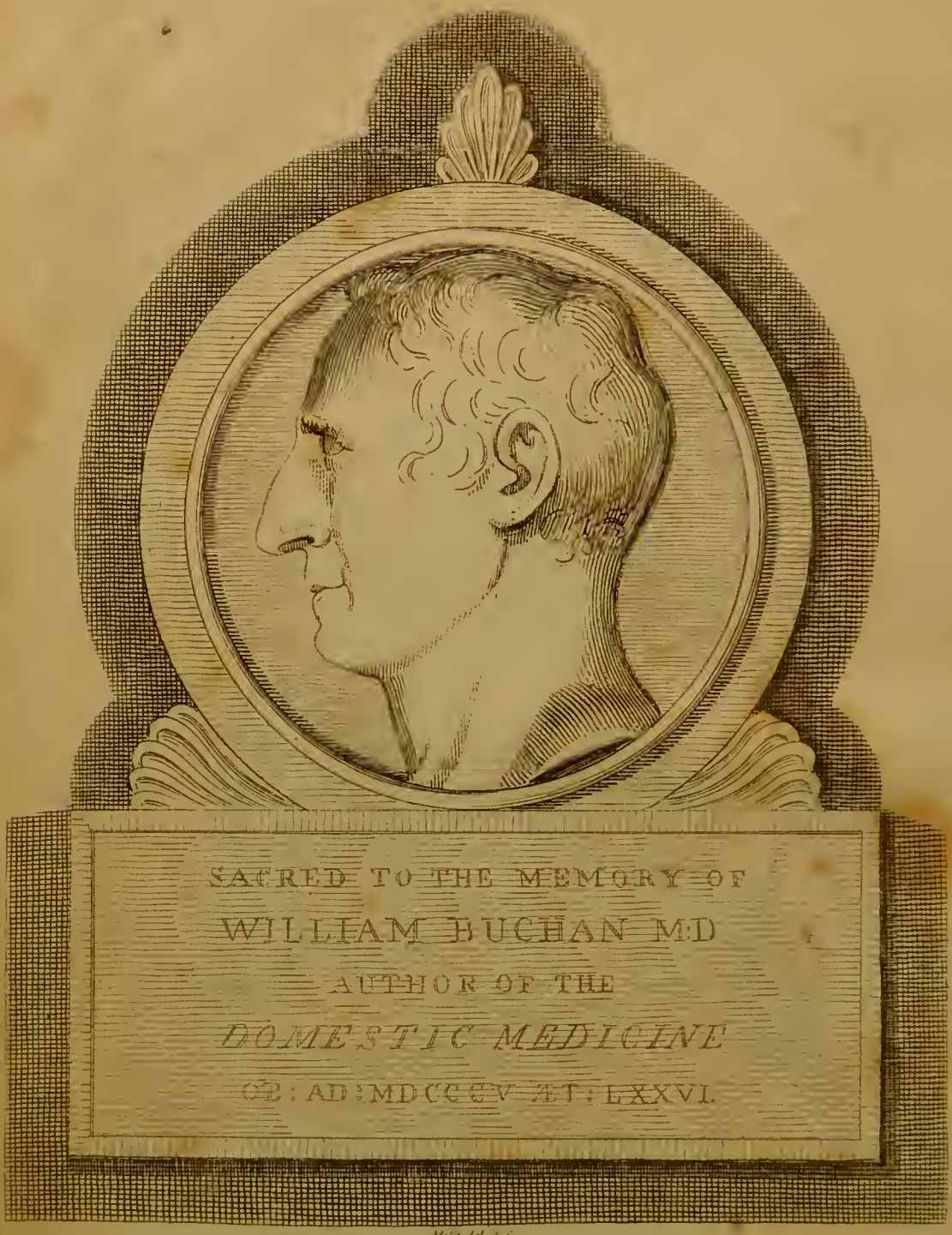

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7924

THE NEW

DOMESTIC MEDICINE;

OR, A

TREATISE ON THE PREVENTION AND CURE OF

DISEASES,

BY REGIMEN AND SIMPLE MEDICINES.

With an Appendix,

CONTAINING

A DISPENSATORY FOR THE USE OF PRIVATE PRACTITIONERS.

By WILLIAM BUCHAN, M. D.

FELLOW OF THE ROYAL COLLEGE OF PHYSICIANS, EDINBURGH.

TO WHICH IS NOW FIRST ADDED,

MEMOIRS OF THE LIFE OF DOCTOR BUCHAN;

AND IMPORTANT EXTRACTS FROM OTHER WORKS,

PARTICULARLY HIS

ADVICE TO MOTHERS,

On the Subject of their own Health, and the Means of promoting the Health, Strength, and Beauty of their Offspring, &c.

BY WILLIAM NISBET, M. D.

FELLOW OF THE ROYAL COLLEGE OF SURGEONS, EDINBURGH;
MEMBER OF THE DIFFERENT MEDICAL SOCIETIES;

Author of the Clinical Guide, Treatise on Diet, Edinburgh School of Medicine, &c. &c.

Including also new Treatises on Sea-Bathing—Mineral Waters—Vaccine Inoculation—Recovery of Drowned Persons—Ruptures, and how to apply the Bandages—Medical Electricity—Child-Birth—Diet of the Poor, &c. &c.

A NEW EDITION, ENLARGED AND IMPROVED.

Embellished with Engravings of many important Subjects.

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1809.

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Omnes homines artem medicam nosse oportet.——Sapientiæ cognitionem medicinæ sororem ac contubernalem esse puto.

HIPPOCRATES.

Primoque medendi scientia, sapientiæ par habebatur.——Rationalem quidem puto medicinam esse debere. CELSUS.

Quemadmodum sanitas omnium rerum pretium excedit, omnisque licitatis fundamentum est, ita scientia vitæ ac sanitatis tuendæ omnium nobilissima, omnibusque hominibus commendatissima esse debet. HOFFMAN.

ADVERTISEMENT.

THE various editions which have appeared of Dr. Buchan's Domestic Medicine are in many respects deficient and imperfect. Where selections are made in them from modern writers, these selections do not incorporate either with the manner or views of this author. Dr. Buchan wrote as he spoke, in that familiar and easy style, that it is scarcely possible for the meanest capacity to mistake his meaning; and it is this happy talent has given a charm and interest to his writings, which will make them always last. The object of the present enlarged edition is to render it complete as his own; and where any practical subjects of importance are omitted, these additions and alterations are made from his own publications. The principal additions made by Dr. Buchan to his Domestic Medicine, in his own life-time, were his Chapter on Mineral Waters, and on Cold Bathing. Previous to the first publication of it he had digested it with much care, and the alterations were only such as arose from the progressive improvement of a few subjects. His plan of cure by regimen and simple means did not admit those bold plans of innovation proper for professional works, and which are often taken up without sufficient experience, to the injury of thousands of the community. It was the fatal consequences so frequently arising from the experiments of innovators that made the late celebrated Dr. Cullen often repeat, "that though it was a common observation, that the grave concealed the faults of physicians, he could say their own consciences concealed many more." Dr. Buchan's mode of practice is totally opposite to this, and no way liable to a similar imputation. His lessons are directed to follow the steps of Nature, to assist her by gentle means, and to trust to regimen more than to active medical powers, in arresting the progress and restoring the

ravages of disease. It is on this account the present edition is enriched with a correct list of medicines, and their doses and preparations, all of the most simple kind, that they may be easily called forth, and, like the tools of the workman, properly arranged, may be applied readily to use.

The present edition claims a superiority over every other that has appeared, as being peculiarly Dr. Buchan's own, without introducing supposed improvements from any other pen. The Editors have, to the best of their judgment, made him supply his own omissions and defects, which are but few in number. This will be particularly seen by the many valuable and highly interesting extracts, made from his Advice to Mothers, which claims the most particular attention of all those females who aspire at this endearing title, and who make the *health, strength, and beauty of their children, their most anxious care and solicitude.* It is also, in order to render it still more valuable, enriched with some useful engravings, illustrative of important subjects; one is a View of the splendid Electrical Machine of Mr. Lowndes, of St. Paul's Church-yard, the largest in this country, and the most successful yet employed in the cure of diseases. It has properly a place in his work, as, under Dr. Buchan's auspices, Mr. Lowndes first began his career of medical practice. Electricity, formerly applied at random, without attention to correct principle, has, in the hands of this gentleman, been brought to greater practical utility and certainty in the cure of diseases than before his time. It is singularly striking, and, the Editors hope, felicitous, in this edition, that it makes its appearance from No. 52, Paternoster-row, the place of the worthy Doctor's residence and practice for the last ten years of his life. The memoirs of this celebrated physician, whose long life was devoted entirely to the benefit of mankind, (composed by one of his intimate friends,) with which this work is accompanied, it is presumed will be found truly interesting to his admirers, and to the public in general.

MEMOIRS

OF

THE LIFE OF DR. BUCHAN.

IF utility of character, and an anxious solicitude for the best interests of mankind, entitle to public approbation and public confidence, the memory of no one has a claim to be recorded with higher respect and veneration on both these accounts than the "Author of the Domestic Medicine." To render man better acquainted with himself, to root out popular prejudices, which time and authority had sanctioned, to the misery of the human race, were the great objects of his useful life. The expansion of medical science, and the benefit of society connected with it, formed the prominent features of his professional character. The rapid and extended sale of his works, both in this country and on the Continent, is the best proof that the community at large have felt the full impression of his humane and liberal views; and as his Domestic Medicine, in particular, is known almost to every person, being considered the family guardian of health, as the Scriptures are of morals*, the life of one who has excited universal attention and interest cannot fail to prove a subject of moment to every reader.

Dr. Buchan was born at Ancram, a small town in Roxburghshire, in Scotland (which gives title to the eldest son of the Marquis of Lothian), in the year 1729. He was descended of a family which enjoyed a small paternal inheritance of their own, and added to their fortune by renting a considerable portion of land besides. It was, perhaps, this recollection of his early days, that has made him descant so much in favour of agricultural pursuits in his works. His family, like most others in that part of the country, were attached to the cause of liberty, and driven to Holland during the reign of the last of the Stuarts, from which they again returned on the Revolution. The pride of the Scots yeomanry is in nothing more conspicuous than in the desire they possess to breed their sons to what are termed genteel professions. The church and physic are accordingly their introductions to life, and in both these departments the individuals of that

* The Doctor, in his Domestic Medicine, treating on the *human passions*, says of religion, "It is utterly impossible that any person of a dejected mind should "enjoy health. Life may, indeed, be dragged out for a few years; but whoever "would live to a good old age must be good-humoured and cheerful: therefore "those persons whose business it is to recommend religion to others should be "aware of dwelling too much on gloomy subjects. That peace and tranquillity "of mind which *true religion* is calculated to inspire is a more powerful argu-"ment in its favour than all the *terrors* that can be uttered. Terrors, indeed, "may deter men from outward acts of wickedness, but can never inspire them "with that love of God and real goodness of heart in which alone true religion "consists."

nation have made a distinguished figure. Dr. Buchan, though he shewed early a predilection for medicine, was intended by his family for the church. He was accordingly sent to the University of Edinburgh to study divinity; but this did not suit the bent of his genius, which first displayed an attachment to mathematical studies, in which he made so great a proficiency as to be soon able to act as preceptor to his fellow-students in these branches of philosophy. These pursuits even claimed his attachment at an advanced period of his life; and when the celebrated Mr. Ferguson, the Lecturer on Natural Philosophy, died, to prove the high opinion he entertained of the Doctor's acquirements on this subject, he bequeathed to him his elegant and instructive apparatus, with which the Doctor gave several courses of lectures at Edinburgh, and was attended by the first literati and scientific characters of that metropolis.

Some years after Dr. Buchan's residence at the Edinburgh University, he dedicated himself solely to the pursuit of medicine, intending it as his future professional occupation. This was a fortunate event for mankind, by the liberal views he has taken of a science so essential to the welfare of society, and from which he has withdrawn that mystery and concealment which envelope it as a profession. His example has been since followed by others; but he has the merit of being the first who unlocked the secrets of the healing art, in order to make man better acquainted with himself, and to enable him to mitigate the sufferings to which his nature is at all times unavoidably subjected.

The talents Dr. Buchan displayed as a student gained him a familiar intercourse with all the Edinburgh professors, and with none more so than the late Dr. Gregory, so distinguished for the same humane and benevolent ideas of medicine as our author. On finishing his studies, his first settlement as a physician was in Yorkshire, where he connected himself in business with a fellow-student; and it was while here he was fortunate enough to be elected to the charge of an extensive foundling hospital, supported by Parliament, after a meritorious competition with ten other candidates, to all of whom he was preferred. His charge at Ackworth laid the foundation of his very great knowledge of the diseases of children; and the result of his experience on that subject he delivered, in the form of an inaugural dissertation, when he took his degree of physician at the University of Edinburgh, a dissertation then much admired, and which was afterwards transferred into his Domestic Medicine, under the head of "The Management and Diseases of Infancy." This part of his work he used to consider himself as the most useful, and the maxims of it have certainly tended much to remove some of those popular prejudices of mothers and nurses so fatal to this early period of life. A strong proof of this is afforded by him in a case of a favourite son, related in his "Advice to Mothers," which we shall here insert.

"Edward Watkinson," the Doctor observes, "was the only son of a country clergyman, of amiable manners and sound learning, but of a recluse turn of mind. The mother was the daughter of a London tradesman, and had been educated with extreme delicacy: she naturally pursued the same line of conduct towards her own child, and her fond husband was too much under the influence of

the like fatal weakness. Many a child is spoiled by the indulgence of one parent: in the case now before us, both concurred to produce that enervating effect. For some time after his birth, Master Neddy was reckoned a promising boy. When I first saw him he was about eighteen years of age, but, to judge by his look, one would have supposed him to have been eighty! His face was long, pale, and deeply furrowed with wrinkles; his eyes were sunk in their sockets; his teeth quite decayed; his nose and chin almost touched each other; his breast narrow and prominent; his body twisted; his legs like spindles; his hands and fingers approaching nearly to the form of a bird's claws: in short, his whole figure exhibited the truly pitiable appearance of a very old man, sinking under the weight of years and infirmities into the grave.

"It was at Midsummer I paid my first visit; I then found him wrapped up in a clothing sufficient for the rigours of a Lapland winter, and so closely muffled, that one could hardly see the tip of his nose. He wore several pair of stockings; his gloves were double, and reached his elbows; and, to complete the absurdity of his dress, he was tightly laced in stays. Though armed in this manner at all points, he seldom peeped out of doors except in the dog-days, and then ventured no further than the church, which was only forty paces from his father's house. I believe this was the most distant excursion he ever made; and the extraordinary attempt was always accompanied with peculiar care, and many additional preservatives from cold. The eye of his parents might be truly said to watch over him not only by day but by night also, as he slept in the same bed with them, having never been permitted to lie alone, lest he should throw the clothes off, or feel the want of any immediate assistance. It did not once occur to his father or mother that all the inconveniences which they so much dreaded could not be half so injurious as the relaxing atmosphere of a warm bed, surrounded by close curtains, and impregnated with the noxious effluvia from their lungs and bodies. His food and drink were of the weakest quality; always administered warm, and by weight and measure. When I recommended a more nourishing diet, and a little generous wine, I was told that the strongest thing Master Neddy had ever taken was *chicken water;* and that they durst not venture on wine or animal food, for fear of a fever. Thus was the poor lad reduced almost to a skeleton, through the silly apprehension of a disease of which he was not susceptible. Nature was in him too weak to spread a hectic flush even for a moment over his countenance, which had acquired the colour of a parboiled chicken: all his vital powers were languid, and even his speech resembled the squeaking of a bird more than the voice of a man. When I spoke of exercise, I was told he took a walk every fine day in the hall, and that was deemed sufficient for one of his delicate constitution. I mentioned a horse—the mother was frightened at the very name of so dangerous an animal. On telling her that I owed the firmness and vigour of my own constitution to riding every day, she began to think there might be something specific in it; and she therefore consented to the purchase of a little horse. But, tame as the creature was, it did not quiet the mother's alarms. Master Neddy, though placed upon the pony's back, was not entrusted with the reins; these were given in charge to a maid-servant, who led the horse round the orchard, while the cautious

rider fastened both hands on the pommel of the saddle; and the father walking on one side, and the mother on the other, held him fast by the legs, lest he might be brought to the ground by any sudden start of his high-mettled racer. This exhibition was too ridiculous not to excite the laughter of the neighbours, which soon put an end to Master Neddy's equestrian exercise. The timidity of a youth thus brought up is more easily conceived than described; fearful of every thing, he would run from the most inoffensive animal as if he had been pursued by a lion or tiger. Improper food, tight or oppressive clothing, and want of fresh air and exercise, have in their turn proved destructive to thousands. This young man fell a victim to them all; and it would have been a miracle, indeed, had he survived their combined influence. He died without a groan, or any mark of disease except premature old age, the machine being fairly worn out before he completed his 21st year. His death proved fatal to both his parents, whose lives were closely *bound up in that of the lad.*

"The father had perceived his own error, but not before it was too late. On reading my *Inaugural Dissertation*, which was then published in Latin, he sent for me, and begged I would endeavour to save his son. The youth, alas! was far beyond the reach of my most zealous efforts: I could only witness the certainty of his fate. Medicine was of as little use to him as consolation to his afflicted parents. The bitterness of their grief was increased by self-reproach; and friendship exerted her soothing voice in vain. The father on his death-bed conjured me to translate my Dissertation into English, as he thought it might be of infinite service to mankind. My compliance with this request gave rise to the "DOMESTIC MEDICINE," of which that essay on the means of preserving the lives of children constitutes the first, and, in my opinion, the best, chapter."

This case the Doctor had always much satisfaction in relating, as shewing the necessity for the removal of popular prejudice on such an important subject.

It was during his visit to Edinburgh, in order to take his degree, that he first became acquainted with the lady, Miss Peters, who afterwards became the object of his matrimonial choice. With this lady he received what was considered not a bad Scots fortune, and through her he formed also some respectable connexions. They lived together at Ackworth till the establishment he superintended was discontinued; and here too his eldest son was born. The experiment made by Parliament, in regard to foundling hospitals, it is said, did not answer their expectation; and the support being withdrawn by them, the fabric, of course, fell to decay. The consequence of this was the return of Dr. Buchan to the Scots metropolis, where he commenced his career of practice, and where, in the course of his intervals of leisure, he composed his Domestic Medicine. This celebrated work first appeared in the year 1770, and was addressed to Sir John Pringle, then President of the Royal Society. It was published, as he informs us, against the opinion of his most respectable friends of the faculty, who considered it would produce a rupture between him and his professional brethren. This was certainly one effect of it; but the feelings of interest had no influence in Dr. Buchan's mind over what he considered public duty and public benefit. This he soon in some degree had experience of; for the Pro-

fessorship of Medicine, in the University of Edinburgh, having become vacant, he stood an unsuccessful candidate for the appointment. The preference on this occasion was given to his friend, Dr. Gregory, and the choice Dr. Buchan did not complain of, as his competitor united with highly respectable talents all those good qualities which ornament human nature.

The publication of his Domestic Medicine soon rapidly diffused Dr. Buchan's reputation as a popular physician; but, in the confined circle of professional intercourse which Edinburgh affords, he found his situation not the most pleasant. He was viewed with that jealousy which his zeal in the cause of humanity, and his desire for the improvement of science, naturally created in the minds of those solely actuated by the spirit of trade; and, after a few years, finding his extent of practice circumscribed, he resolved to try his fortune on the wide theatre of the London metropolis. The success he here met with at first was very flattering to his expectations; but Dr. Buchan was not bred in the school of rigid severity; he was fond of indulging in the pleasures of society, and in these he gave a truce to business; ambitious of exercising his profession rather for the purposes of benevolence, than sticking closely to its duties for the acquisition of wealth.

As a practical physician, Dr. Buchan was guided by a close adherence to experience. He despised the idle reasonings of speculation on a science where facts alone should hold the sway; and his works are, therefore, a detail of what time and opportunity had shewn him was really useful: hence his maxims may be always trusted to. It is the impression of this on the minds of the public that has rendered the sale of his Domestic Medicine so extensive; upwards of twenty very large editions of it have been called for since the time of its first publication; it is in the hands of every one in America, and it has been translated into almost every language in Europe. Highly as it is prized in this country, the Continent seems to have surpassed us in their respect for its author; and a strong proof we have of this in the very handsome expression of her sense of its merit evinced by the late Catherine, Empress of Russia. This sovereign, the liberal patroness of talents of every description, transmitted to the author of the Domestic Medicine a large gold medallion of value, as a mark of her esteem, by the hands of her Chancellor, Osterman, whose letter on this occasion we have faithfully copied, as follows:—

St. Petersbourg, ce 30 Janvier, 1788.

L'Impératrice, mon auguste Souveraine, m'a chargé de vous témoigner en son nom, Monsieur, combien elle vous a sû, gré de l'ouvrage intéressant, que vous venés de lui adresser. Sa Majesté Impériale se fera toujours un plaisir de manifester à chaque occasion le cas qu'elle fait des lettres et de ceux qui les professent avec autant de distinction que vous Monsieur. J'ai ordré de sa part de vous envoyer la ci-jointe médaille comme une marque plus particulière de son estime. En même tems je m'empresse à vous assurer des sentimens de la parfaite considération, avec laquelle j'ai l'honneur d'être.

Monsieur,

Votre très-humble et très-obéissant serviteur,

Mr. Buchan, à Edinbourg. C. J. D'OSTERMAN.

(TRANSLATION.)

St. Petersburgh, 30th January 1788.

The Empress, my august Sovereign, has charged me, Sir, to assure you, in her name, how much she has been delighted with your interesting work, addressed to her. Her Imperial Majesty will always feel a pleasure in taking every opportunity of shewing the interest she has in literature, and particularly in those who cultivate it with so much utility and reputation as you, Sir. I am ordered by her to transmit you the medal that accompanies this, as a still further mark of her esteem. At the same time I embrace this opportunity to assure you of the sentiments of high consideration with which I have the honour to be, Sir,

Your most humble and most obedient Servant,

(Signed) C. J. D'OSTERMAN.

(Addressed) Mr. Buchan, Edinburgh.

But the Domestic Medicine was not the only one of Dr. Buchan's publications. He had not been long in London till he marked the dreadful consequences which attend the practice of empiricism in the metropolis for the cure of the venereal disease. The young and unwary, anxious to conceal their situation, and quickly to get rid of what is often but a trifling evil, misled by the impositions of public advertisements, consign themselves to the hands of ignorance and unprincipled deception. Here their miseries are augmented, their health destroyed, and their purse and constitution both drained, before they find out their woeful mistake. With a view to warn the victims of such mal-practice of the dangers they run, and to point out the most rational method of cure, he wrote his "Treatise on the Venereal Disease." The subject he has pursued in the same popular manner as in his Domestic Medicine, and the work has certainly been productive of much benefit to the young and imprudent part of society. This and the Domestic Medicine may be considered as his two chief works; but in the last years of his life he gave some further observations on the subject of the Treatment of Children; and also on mothers, under the title of "Advice to Mothers on their own Health, and on the Means of promoting the Health, Strength, and Beauty of their Offspring." Thus he may be said to have returned to the favourite topic of his youth. Yet this work, though containing many excellent remarks, is written in a manner more diffuse than any of the others, and does not possess the same value and practical importance.

Having thus traced the leading traits of Dr. Buchan's history as a physician, let us next consider his character as a man. No one possessed in a higher degree the principles of benevolence and good will. Alive to the better feelings of the heart, he was an enemy to none but apothecaries, whom he viewed as a serious injury to the profession, by degrading it to the level of a trade. His ear was ever open to the tale of distress, and his hand never withheld its aid to suffering humanity, even beyond what his pecuniary circumstances could admit. As his heart was ever ready to expand, he enjoyed the pleasures of society with much relish, and he brought into it that good humour and conviviality which made his company always courted. His manners were pleasing and familiar, and his

conversation was enlivened with a fund of well-chosen anecdote, which never failed to delight his company: to these prepossessing qualities he added a mind well stored with classical learning, the acquirements of his early youth, which he retained and applied with much judgment to the last hour of his life. This turn of mind made him always prefer the society of the young; and in order to enjoy it, during the last years of his life, he fixed his residence near the Chapter Coffee-house, a place frequented at one period by many of the first literary and medical characters. Here he enjoyed himself when not occupied in business, and to those who frequented it he formed a most important and valuable acquisition: he may be said, through life, to have been one "who held the *even tenour* of his way." His days were protracted to a late period, being, when he died, no less than seventy-six; and during this lengthened time he had known little either of sickness or bodily infirmity. At length he felt the decay of his frame approach, and symptoms of water in the chest shewed themselves: sensible of the event, he spoke of it with the calmness of a philosopher, and neither murmured nor complained from any sufferings he felt. So completely did he retain his faculties to the last, that he was abroad the very day on which he died. In the evening of that day, feeling himself weak and exhausted, he had reclined on a sofa, and in the attempt to reach his bed he suddenly expired, after talking in his usual placid manner but a few minutes before. Thus, in the language of Scripture, the *last end of that man was peace*; no confinement had imbittered his final hours, or barred him from his usual pursuits: he had also that super-eminent felicity of his intellectual powers remaining unimpaired and collected to the end.

In person, Dr. Buchan's appearance was no less prepossessing than the leading features of his mind: his countenance was dignified and commanding, but tempered by the mild expression of his eye, which was at the same time acute and penetrating; his nose was a fine aqualine, and rendered the contour of his face very happy for the delineation of the painter; his figure was strong and well-proportioned, and bore, till within two or three years of his death, the marks of vigour and pristine soundness. When his head became silvered by age, he was one of those impressive figures which no one could approach without feelings of respect, mixed with sentiments of regard: dignity and grace were at this period of his life happily blended in his appearance.

The acquirements of Dr. Buchan's mind were not confined solely either to medical or philosophical studies; the elegant art of poetry he had occasionally courted with success, and some of his productions of this class are at present in the hands of his friends. One pleasure of his life, which marked the benevolence of his disposition, was a desire to patronise the young who were launching into the world. By his advice and assistance many were placed in comfortable situations, which they would not otherwise have attained; it was by his suggestion Mr. Lowndes, of St. Paul's Church-yard, was first induced to commence the pursuit of medical electricity, which he has since carried on with such astonishing success in the cure of diseases, and rendered it a valuable appendage to practical medicine.

The disinterestedness of Dr. Buchan's temper, after what has been observed, it would be superfluous to descant on. We cannot omit, however, mentioning it on one occasion. He was one of those in the late years of scarcity particularly consulted by Government on the means of bettering the diet of the poor, so as to unite sufficient nourishment with economy. On this subject he not only gave a number of valuable suggestions, but published a pamphlet of instructions for this purpose, for which he received the thanks of the Board of Agriculture. His manners were too mild and philanthropic for the interior of a court, and he used to complain that at one time even *royal ears* had been shut against him.

The liberality which distinguished Dr. Buchan's character did not forsake him in his religious principles. His parental education had bred him originally in the severe discipline of Calvin, but which his residence at the University effectually changed. Against church establishments he always inveighed: he considered religion as a feeling of the heart, to the practice of which every man himself was competent. Thus he reasoned as a philosopher—he acted as a philanthropist. His exit shewed the conviction of his understanding on this subject; for he bore no apprehension of death when he found the approach of it, but shewed the same serenity of temper which distinguished him through life: this could not arise from the weakness of false pride, but from the thorough impression of a firm cultivated mind.

Dr. Buchan left behind him a son and a daughter: the former is bred to the profession, and a member of the London College of Physicians; he inherits the abilities of his father, and is a man of great professional information: several productions have appeared from his pen which do him infinite credit. His daughter is unmarried, and resides with her brother, in Percy-street, Rathborne-place.

Dr. Buchan's death happened, we observed, on the 25th February, 1805, and on the 6th of March his remains were interred with proper funeral solemnity in the cloisters of Westminster-abbey, near to those of Sir R. Jebb, whose professional sentiments and conduct differed widely from that of our author. On this occasion every respect was paid by Dr. Vincent to the memory of a man the friend of the human race, and a liberality displayed by him which does credit to his character. The corpse was followed by none but friends, feeling in a proper manner the solemnity of the occasion, and the worth of the remains they were consigning to their last mansion. A bust and tablet have since been erected in the cloisters of the Cathedral, sacred to the memory of this celebrated physician, from which an engraving is now taken, and forms the frontispiece of this work.

PRELIMINARY DISCOURSE;

OR,

ADVICE TO MOTHERS.

THE works of Dr. Buchan form a system of Domestic Medicine peculiarly his own. They were written, as we have observed, at different periods of life, and were meant to embrace the various circumstances and situations of society, in regard to the preservation of their health, and the cure of their diseases. Had he lived longer, it is probable he would have arranged them according to this view, as his work on Mothers is only an amplification of part of those subjects which were first given in the Domestic Medicine. As a preliminary to the present edition of that work, a few extracts will be proper from his last Treatise; for the health and diseases of the Mother are naturally entailed on the offspring, and form the foundation of every system that aims at the preservation of health on a general scale.

On the importance of the mother in the scale of society. "The more I reflect," says Dr. Buchan, "on the situation of the mother, the more I am struck with the extent of her powers, and the inestimable value of her services. In the language of love, women are called angels: but this is a weak and a silly compliment; they approach nearer to our ideas of the Deity: they not only create, but sustain their creation, and hold its future destiny in their hands: every man is what his mother has made him, and to her he must be indebted for the greatest blessings in life, a healthy and vigorous constitution. But while I speak of the dignity of the female character, it must be understood, that by a mother I do not mean the woman who merely brings a child into the world, but she who faithfully discharges the duties of a parent,—whose chief concern is the well-

being of her infant,—and who feels all her cares amply repaid by its growth and activity. No subsequent endeavours can remedy or correct the evils occasioned by a mother's negligence; and the skill of the physician is exerted in vain to mend what she, through ignorance or inattention, may have unfortunately marred."

"One of the objects I have in view is to relieve mothers from groundless fears,—to teach them how to prevent diseases that are almost always the consequences of mismanagement; to inspire them with the fullest confidence in proper nursing, and with strong prejudices against the use of medicines, which do mischief twenty times for once that they do good."

An attachment to quackery unfortunately distinguishes most of the female sex; "but quackery, in the nursery," says Dr. Buchan, "is not the only error I shall endeavour to undeceive mothers in. The want of proper instructions, at an early period of life, betrays them into a variety of fatal mistakes respecting their own health, as well as that of their children. These mistakes, and the means of rectifying them, form a considerable part of the following work. The language is adapted to every capacity, it being of consequence that every woman should understand it; and the rules laid down are practicable in every condition, except that of cheerless poverty. With the hope of removing this exception, I shall point out the most effectual method of assisting women so circumstanced; and I do not know any manner, in which humanity, charity, and patriotism, can be more laudably exerted, or even a part of the public revenue more usefully employed, than in enabling mothers to bring up a healthy and hardy race of men, fit to earn their livelihood by useful employments, and to defend their country in the hour of danger!"

The danger of female fashions. "The woman," says the Doctor, "who feels a laudable wish to look well, and to be so in reality, must place no confidence in the silly doctrines, or the deceitful arts, of fashion. She must consult nature and reason, and seek for beauty in the temple of health; if she looks for it elsewhere, she will

experience the most mortifying disappointment: her charms will fade; her constitution will be ruined; her husband's love will vanish with her shadowy attractions; and her nuptial bed will be unfruitful, or cursed with a puny race, the hapless victims of a mother's imprudence. She cannot transmit to her children what she does not herself possess; weakness and disease are entailed upon her posterity; and, even in the midst of wedded joys, the hopes of a healthy and vigorous issue are blasted for ever."

On the necessity of air, exercise, and cleanliness. "Pure air and moderate exercise," says the Doctor, "are not of less importance than food and drink. Women are much confined by their domestic employments and sedentary pursuits; for this very reason they ought to go out frequently, and take exercise in the open air, not in a close carriage, but on foot or on horseback.

"It may seem a little strange that I should think it in any sort necessary to recommend cleanliness to the fair sex: I am far from intending to convey the most distant insinuation of their negligence in this respect; I only wish to heighten their ideas of its utility, and to point out further methods of increasing its benefits. They are rather too sparing of water, from an apprehension of its injuring the skin, or giving it a disagreeable roughness. This is a great mistake. Pure water may be truly considered as a fountain of health, and its frequent use is the best means of improving the skin, and of strengthening the whole frame. As a preservative of health, cold water is far more bracing and more invigorating than warm, though the latter may be often advisable in cases of particular infirmity, indisposition, or disease.

"All women of delicacy and good sense are sufficiently attentive to remove any outward soil or visible dirt from their persons; but they do not all know that a vapour, too fine to be perceived by the eye, is constantly issuing from the pores, the little orifices or mouths of which must therefore be kept clean and unobstructed. For the same reason the linen and inferior articles of

dress should be often changed, as they become impregnated with the perspirable matter, and, when foul, would not only prevent the escape of any more, but would even have a part of what they had received re-absorbed by the skin, and thrown back into the system. The whole dress also should be loose, and as light as may be found consistent with due warmth, so as not to increase perspiration too much by its heaviness, nor to check either that or the free circulation of the blood by its pressure."

On the necessity of cheerfulness. Dr. Buchan says, "Cheerfulness, and good humour, has the happiest influence on the body and mind; it gives a salutary impulse to the circulation of the blood, keeps all the vital organs in easy and agreeable play, renders the outward deportment highly pleasing, while the perpetual sunshine within spreads a fascinating loveliness over the countenance. Its opposite, peevishness, or ill humour, imbitters life, saps the constitution, and is more fatal to beauty than the small-pox, because its ravages are more certain, more disgusting, and more permanent.

"Such are the chief points I wish to impress on the minds of women before marriage. Objects of so much importance in every stage or period of life are deserving of peculiar regard when an union of the sexes is proposed. It is little short of intentional murder, on the part of a weak, languid, nervous, or deformed woman, to approach the marriage bed. Improper passions may urge her to become a wife; but she is wholly unfit to become a mother. She risks her own life; she disappoints the natural wishes of her husband; and, should she have children, her puny sickly offspring will have little cause to thank her for their wretched existence. The evil is not confined to her own family; society at large is materially injured; its well-being depends on the vigour of the members that compose it; and universal experience has fully proved that the frame of a husbandman or a hero is not to be moulded or cherished in the womb of debility, and that the bold eagle will never be brought forth by the timid dove."

The Doctor, on the choice of a husband, says, "Hav-

ing endeavoured to prove that health is so indispensable a requisite in females before marriage, they may well suppose that I deem it no less necessary in the other sex. I am always sorry to see that precious blessing sacrificed in an alliance with infirmity, or youth and beauty consigned to the frozen arms of age. Misery must be the inevitable consequence of such unnatural matches. But I fear that my remonstrances will have little effect in restraining the undue exercise of parental authority, or in attempting to open the eyes of a woman to her certain destruction when she suffers herself to be dazzled by the splendour of riches, or charmed by the sound of an empty title."

The Doctor then proceeds to state *the horrid crime of producing abortion.* "The unnatural mother," says he, "is not always the only monster concerned in those scenes of horror: her base seducer is too often the adviser of the desperate resolution, and crowns his guilty joys with double murder! Another ruffian, some male or female practitioner in midwifery, is also engaged in the hellish plot, and lends a hand to perpetrate the foul deed, alike regardless of the mother's danger, and deaf to the cries of infant blood! I never heard without shuddering any advertisement of temporary retreats, or pretended accommodations for pregnant ladies; I always view it as a wicked allurement to unfortunate women, and as a daring hint from some ready assassin of innocence. It is not long since one of those wretches was convicted of killing both mother and child; and I have myself seen a great number of embryos exhibited by a man, who, I firmly believe, obtained them this way. The dread of public shame or of private scorn, though no excuse for murder, may urge the victim of seduction to commit a crime at once so abominable and so dangerous. But is it possible that a married woman should madly and wickedly attempt to procure abortion, merely from an apprehension of a large family, or to avoid the trouble of bearing and bringing up children? Can she hope to taste the joys, and yet destroy the fruits, of love? What a frantic idea!—The same poison puts an end to both.

And in vain does she flatter herself that her guilt is concealed, or that no law exists to punish it. The laws of nature are never violated with impunity, and, in the cases alluded to, the criminal is made at once to feel the horrors of late remorse, and the keenest pangs of a torn, disordered, and incurable frame. But suppose that a miscarriage brought about by such detestable means did not endanger the health and life of the mother: suppose that an act held in such just abhorrence, both by earth and Heaven, could possibly escape punishment: suppose a woman deaf to the cries of nature, incapable of tender emotions, and fearless of any immediate sufferings in her own person: I have one argument more to make her stop her murderous hand; perhaps the embryo, which she is now going to destroy, would, if cherished in her womb, and afterwards reared with due attention, prove the sweetest comfort of her future years, and repay all her maternal care with boundless gratitude. It may be a daughter to nurse her in her old age, or a son to swell her heart with joy at his honourable and successful career in life."

On proper conduct during pregnancy. The Doctor says, on this important subject, that "Cheerfulness, or good humour, is superior to all other considerations. In this state, more than in any other, the changes of bodily health seem to be almost wholly under the immediate influence of the mind; and the mother appears well or ill according as she gives way to pleasant or to fretful emotions. I admire that fragment of ancient history in which we are informed that the eastern sages, while their wives were pregnant, took care to keep them constantly tranquil and cheerful by sweet and innocent amusements, to the end that, from the mother's womb, the fruit might receive no impressions but what were pleasing, mild, and agreeable to order. So fine a lesson of wisdom, and of parental as well as conjugal love and duty, cannot be too closely studied, or too diligently carried into practice, by the husband who sets any value on his wife's health,—who wishes to secure her affection and gratitude,—and who pants for the exquisite happiness of

being the father of a lively, well-formed, and vigorous child.

"It is during pregnancy, also, that every woman should be doubly attentive to preserve the utmost sweetness and serenity of temper,—to dispel the glooms of fear and melancholy,—to calm the rising gusts of anger, and to keep every other unruly passion or desire under the steady control of mildness and reason. The joy of becoming a mother, and the anticipated pleasure of presenting a fond husband with the dearest pledge of mutual love, ought naturally to increase her cheerfulness, and would certainly produce that effect, were not these emotions too often checked by a false alarm at the fancied danger of her situation. It is therefore of the utmost importance to convince her that her terrors are groundless; that pregnancy is not a state of infirmity or danger, but affords the strongest presumption of health and security;—that the few instances she may have known of miscarriage or of death were owing to the improper conduct of the women themselves, besides being too inconsiderable to be compared with the countless millions of persons in the like condition, who enjoy both then and afterwards a greater degree of health than they ever before experienced;—and, lastly, that the changes she feels in herself, and her quick perceptions of uneasiness, are not symptoms of weakness, but the consequences of an increased sensibility of her womb, and timely warnings of the effects of indiscretion or intemperance.

"As soon as a woman begins to consult her caprice, instead of attending to nature, she is sure to be encouraged in absurdity by old nurses or old gossips, who take a delight in amusing her credulity by the relation of many wonderful and alarming injuries, said to have been done to children, through the unsatisfied desires of their mothers.

"The doctrine of imagination, like every thing founded in absurdity, confutes itself by being carried too far. The same power of marking or disfiguring of a child is ascribed to the sudden terrors and the ungrateful crav-

ings of pregnant women. The abettors of this doctrine are not even content with a few specks or blemishes on the skin, but maintain that the mother's imagination may take off a leg or an arm, or even fracture every bone in the child's body. I have seen a child born without a head; but it was not alleged that the mother had been present at the beheading of any person, or had ever been frightened by the spectacle of a human body deprived of its head. If shocking sights of this kind could have produced such effects, how many headless babes had been born in France during ROBESPIERRE'S reign of terror!

"It cannot be supposed that I look upon frightful objects, scenes of horror, or any other causes of a sudden shock, as matters of indifference. On the contrary, I would have them very carefully avoided, as they have often caused abortion, or otherwise injured the health of both the mother and the child, though they cannot discolour the skin, derange the limbs, or alter the shape of the latter. It is from this silly apprehension, in consequence of any fright, that I wish to relieve the minds of credulous and timid poor women, who may do themselves a real injury by the dread of an imaginary evil.

"I hope, therefore, it will not be deemed *needlessly severe* to recommend, in the early period of pregnancy, a becoming check on absurd and pernicious desires, and a moderate use of such things as have been always found to agree with the stomach and constitution. I do not insist upon a total change from former modes of living; but, unless the appetite be very much vitiated, it will direct women to what is most proper and salutary."

"While I am thus tracing the boundaries of rational indulgence, which should not be overstepped by those who have it in their power to command every gratification, I see also the necessity of some admonitions to women whose narrow circumstances may appear to require no additional restraint. It has been very truly observed, that, in the lowest classes of society, especially in great cities, we often meet with a sort of luxury more baneful than any which prevails in high life,—a luxury

that consists in the immoderate use of strong liquors; to which the miscarriages, the fevers, and the death of so many poor married women, in London and other populous towns, must be ascribed. There is nothing, in fact, so pernicious to the mother, and to the fœtus in her womb, as drinking ardent spirits, especially when carried to excess. It is administring poison to the embryo, and is certainly a species of murder.

"Women in the country, who follow very hard occupations, feel no inconvenience from their usual employments in the early months of pregnancy, and require no indulgence but a little abatement of their usual toil when they become unwieldy. They know nothing of artificial precepts, which would teach them to invert the order of nature. Temperance and moderate exercise, proper methods of labour and of rest, the country air, and the cheering influence of a contented mind, ensure to them the continuance of health in every stage, an exemption from the common diseases of pregnancy, an easy lying-in, and a speedy recovery from childbed. The vigour also of their offspring is justly proverbial."

On the article of female dress, the Doctor concludes in the following impressive language:—"To sum up in a few words the chief part of my advice to pregnant women, and to the fair sex in general, I need use but a single assertion, that a flowing dress, sustained by the shoulders, and gently compressed by a zone round the middle, with only as much tightness as is necessary to keep the clothes in contact with the body, ever was, and ever will be, the most healthy, comfortable, and truly elegant habit, that females can wear, or fancy invent."

Upon the important subject of nursing and rearing of children, and the injury done to them by the unnecessary use of medicines, the Doctor writes with great energy, and the following extracts are particularly recommended to the serious attention of all parents.

"Of all the absurdities that prevail in the treatment of infants," says he, "there is none so grossly repugnant to common sense as the phrenzy of giving them physic

on the poor babes, who, to make his chariot roll, must swallow drugs every day! Yet, such is the infatuation of mothers, that, if this be not done, they think their children neglected, and dismiss one apothecary to make way for another, who administers medicines with a more liberal, or rather a more destructive, hand."

"Would you have mankind return to all their natural duties," says the eloquent ROUSSEAU, "begin with mothers of families; you will be astonished at the change this will produce. Should mothers condescend to *nurse their own children*, manners would form themselves: the sentiment of nature would revive in our hearts; the state would be repeopled; this principal point, this alone would reunite every thing. A taste for the charms of domestic life is the best antidote against corruption of manners. When a family is all lively and animated, domestic concerns afford the most delightful occupation to a woman, and the most agreeable amusement to a man. From the correction of this one abuse will soon result a general reformation: nature will quickly reassume all her rights: let wives once again become mothers; and the men will presently again become fathers and husbands." To this sketch, from so great a master, Dr. Buchan adds, "that the happy consequences of such a reform would be no less striking in a medical than in a moral point of view. A stop would be put to the cruel ravages of death in early life. The long catalogue of infantile affliction would almost become a blank, or contain nothing to excite alarm. Every child, invigorated by his mother's milk, would, like the young HERCULES, have force sufficient to strangle in his cradle any serpents that might assail him. Occasional illness would be to him only part of a necessary course of discipline, to inure him betimes to bear pain with manly fortitude. In short, health, strength and beauty, would take place of puniness, deformity, and disease; society would be renovated, and man, instead of dwindling away, as he now does, by a gradual degeneracy, would soon rise to the original perfection of his nature."

PART I.

OF THE

GENERAL CAUSES OF DISEASES.

CHAP. I.

OF CHILDREN.

THE better to trace diseases from their original causes, we shall take a view of the common treatment of mankind in the state of infancy. In this period of our lives, the foundations of a good or bad constitution are generally laid: it is therefore of importance, that parents be well acquainted with the various causes which may injure the health of their offspring.

It appears from the annual registers of the dead, that almost one half of the children born in Great Britain die under twelve years of age. To many, indeed, this may appear a natural evil; but on due examination it will be found to be one of our own creating. Were the death of infants a natural evil, other animals would be as liable to die young as man; but this we find is by no means the case.

It may seem strange that man, notwithstanding his superior reason, should fall so short of other animals in the management of his young: but our surprise will soon cease, if we consider that brutes, guided by instinct, never err in this respect; while man, trusting solely to art, is seldom right. Were a catalogue of those infants

who perish annually by art alone exhibited to public view, it would astonish most people.

If parents are above taking care of their children, others must be employed for that purpose: these will always endeavour to recommend themselves by the appearance of extraordinary skill and address. By this means such a number of unnecessary and destructive articles have been introduced into the diet, clothing, &c. of infants, that it is no wonder so many of them perish.

Nothing can be more preposterous than a mother who thinks it below her to take care of her own child, or who is so ignorant as not to know what is proper to be done for it. If we search Nature throughout, we cannot find a parallel to this. Every other animal is the nurse of its own offspring, and they thrive accordingly. Were the brutes to bring up their young by proxy, they would share the same fate with those of the human species.

We mean not, however, to impose it as a task upon every mother to suckle her own child. This, whatever speculative writers may allege, is in some cases impracticable, and would inevitably prove destructive both to the mother and child. Women of delicate constitutions, subject to hysteric fits, or other nervous affections, make very bad nurses: and these complaints are now so common, that it is rare to find a woman of fashion free from them; such women, therefore, supposing them willing, are often unable to suckle their own children.

Almost every mother would be in a condition to give suck, did mankind live agreeably to Nature; but whoever considers how far many mothers deviate from her dictates, will not be surprised to find some of them unable to perform that necessary office. Mothers who do not eat a sufficient quantity of solid food, nor enjoy the benefit of free air and exercise, can neither have wholesome juices themselves, nor afford proper nourishment to an infant. Hence children who are suckled

by delicate women, either die young, or continue weak and sickly all their lives.

When we say that mothers are not always in a condition to suckle their own children, we would not be understood as discouraging that practice. Every mother who can, ought certainly to perform so tender and agreeable an office *. But, suppose it to be out of her power, she may, nevertheless, be of great service to her child. The business of nursing is by no means confined to giving suck. To a woman who abounds with milk, this is the easiest part of it. Numberless other offices are necessary for a child, which the mother ought at least to see done.

A mother who abandons the fruit of her womb, as soon as it is born, to the sole care of an hireling, hardly deserves that name. A child, by being brought up under the mother's eye, not only secures her affection, but may reap all the advantages of a parent's care, though it be suckled by another. How can a mother be better employed than in superintending the nursery? This is at once the most delightful and important office; yet the most trivial business or insipid amusements are often preferred to it! A strong proof both of the bad taste and wrong education of modern females.

It is indeed to be regretted, that more care is not bestowed in teaching the proper management of children to those whom Nature has designed for mothers. This, instead of being made the principal, is seldom considered as any part of female education. Is it any

* Many advantages would arise to society, as well as to individuals, from mothers suckling their own children. It would prevent the temptation which the poor women are laid under of abandoning their children to suckle those of the rich for the sake of gain; by which means society loses many of its useful members, and mothers become in some sense the murderers of their own offspring. I am sure I speak within the truth when I say that not one in twenty of those children live, who are thus abandoned by their mothers. For this reason no mother should be allowed to suckle another's child, till her own is either dead or fit to be weaned. A regulation of this kind would save many lives among the poorer sort, and could do no hurt to the rich, as most women who make good nurses, are able to suckle two children in succession upon the same milk.

wonder, when females so educated come to be mothers, that they should be quite ignorant of the duties belonging to that character? However strange it may appear, it is certainly true, that many mothers, and those of fashion too, are as ignorant, when they have brought a child into the world, of what is to be done for it, as the infant itself. Indeed, the most ignorant of the sex are generally reckoned most knowing in the business of nursing. Hence, sensible people become the dupes of ignorance and superstition; and the nursing of children, instead of being conducted by reason, is the result of whim and caprice *.

Were the time that is generally spent by females in the acquisition of trifling accomplishments, employed in learning how to bring up their children; how to dress them so as not to hurt, cramp, or confine their motions; how to feed them with wholesome and nourishing food; how to exercise their tender bodies, so as best to promote their growth and strength; were these made the objects of female instruction, mankind would derive the greatest advantages from it. But while the education of females implies little more than what relates to dress and public shew, we have nothing to expect from them but ignorance even in the most important concerns.

Did mothers reflect on their own importance, and lay it to heart, they would embrace every opportunity of informing themselves of the duties which they owe to their infant offspring. It is their province, not only to form the body, but also to give the mind its most early bias. They have it very much in their power to make men healthy or valetudinary, useful in life, or the pests of society.

* Tacitus, the celebrated Roman historian, complains greatly of the degeneracy of the Roman ladies in his time, with regard to the care of their offspring. He says, that in former times, the greatest women in Rome used to account it their chief glory to keep the house and attend their children; but that now the young infant was committed to the sole care of some poor Grecian wench, or other menial servant. We are afraid, wherever luxury and effeminacy prevail, there will be too much ground for this complaint.

But the mother is not the only person concerned in the management of children. The father has an equal interest in their welfare, and ought to assist in every thing that respects either the improvement of the body or mind.

It is pity that the men should be so inattentive to this matter. Their negligence is one reason why females know so little of it. Women will ever be desirous to excel in such accomplishments as recommend them to the other sex. But men generally keep at such a distance from even the smallest acquaintance with the affairs of the nursery, that many would reckon it an affront, were they supposed to know any thing of them. Not so, however, with the kennel or the stables; a gentleman of the first rank is not ashamed to give directions concerning the management of his dogs or horses, yet would blush were he surprised in performing the same office for that being who derived its existence from himself, who is the heir of his fortunes, and the future hopes of his country.

Nor have physicians themselves been sufficiently attentive to the management of children; this has been generally considered as the sole province of old women, while men of the first character in physic have refused to visit infants even when sick. Such conduct in the faculty has not only caused this branch of medicine to be neglected, but has also encouraged the other sex to assume an absolute title to prescribe for children in the most dangerous diseases. The consequence is, that a physician is seldom called till the good women have exhausted all their skill; when his attendance can only serve to divide the blame, and appease the disconsolate parents.

Nurses should do all in their power to prevent diseases; but when a child is taken ill, some person of skill ought immediately to be consulted. The diseases of children are generally acute, and the least delay is dangerous.

Were physicians more attentive to the diseases of infants, they would not only be better qualified to treat

them properly when sick, but likewise to give useful directions for their management when well. The diseases of children are by no means so difficult to be understood as many imagine. It is true, children cannot tell their complaints; but the causes of them may be pretty certainly discovered by observing the symptoms, and putting proper questions to the nurses. Besides, the diseases of infants being less complicated, are easier cured than those of adults *.

It is really astonishing, that so little attention should in general be paid to the preservation of infants. What labour and expence are daily bestowed to prop an old tottering carcase for a few years, while thousands of those who might be useful in life perish without being regarded! Mankind are too apt to value things according to their present, not their future, usefulness. Though this is of all others the most erroneous method of estimation; yet upon no other principle is it possible to account for the general indifference with respect to the death of infants.

Of diseased Parents.

One great source of the diseases of children is, the UNHEALTHINESS OF PARENTS. It would be as reasonable to expect a rich crop from a barren soil, as that strong and healthy children should be born of parents whose constitutions have been worn out with intemperance or disease.

An ingenious writer † observes, that on the constitution of mothers depends originally that of their offspring. No one who believes this will be surprised, on a view of the female world, to find diseases and

* The common opinion, that the diseases of infants are hard to discover and difficult to cure, has deterred many physicians from paying that attention to them which they deserve. I can, however, from experience declare, that this opinion is without foundation: and that the diseases of infants are neither so difficult to discover, nor so ill to cure, as those of adults.

† Rousseau.

death so frequent among children. A delicate female, brought up within doors, an utter stranger to exercise and open air, who lives on tea and other slops, may bring a child into the world, but it will hardly be fit to live. The first blast of disease will nip the tender plant in the bud; or should it struggle through a few years' existence, its feeble frame, shaken with convulsions from every trivial cause, will be unable to perform the common functions of life, and prove a burden to society.

If to the delicacy of mothers we add the irregular lives of fathers, we shall see further cause to believe that children are often hurt by the constitution of their parents. A sickly frame may be originally induced by hardships or intemperance, but chiefly by the latter. It is impossible that a course of vice should not spoil the best constitution; and, did the evil terminate here, it would be a just punishment for the folly of the sufferer; but when once a disease is contracted and rivetted in the habit, it is entailed on posterity. What a dreadful inheritance is the gout, the scurvy, or the king's evil, to transmit to our offspring! how happy had it been for the heir of many a great estate had he been born a beggar, rather than to inherit his father's fortunes at the expence of inheriting his diseases!

A person labouring under any incurable malady ought not to marry. He thereby not only shortens his own life, but transmits misery to others; but when both parties are deeply tainted with the scrophula, the scurvy, or the like, the effects must be still worse. If such have any issue they must be miserable indeed. Want of attention to these things, in forming connections for life, has rooted out more families than plague, famine, or the sword; and as long as the connections are formed from mercenary views, the evil will be continued *.

* The Lacedemonians condemned their king Archidamus for having married a weak, puny woman; because, said they, instead of propagating a race of heroes, you will fill the throne with a progeny of changelings.

In our matrimonial contracts, it is amazing so little regard is had to the health and form of the object. Our sportsmen know that the generous courser cannot be bred out of the foundered jade, nor the sagacious spaniel out of the snarling cur. This is settled upon immutable laws. The man who marries a woman of a sickly constitution, and descended of unhealthy parents, whatever his views may be, cannot be said to act a prudent part. A diseased woman may prove fertile; should this be the case, the family must become an infirmary; what prospect of happiness the father of such a family has, we shall leave any one to judge *.

Such children as have the misfortune to be born of diseased parents, will require to be nursed with greater care than others. This is the only way to make amends for the defects of constitution: and it will often go a great length. A healthy nurse, wholesome air, and sufficient exercise, will do wonders. But when these are neglected, little is to be expected from any other quarter. The defects of constitution cannot be supplied by medicine.

Those who inherit any family disease ought to be very circumspect in their manner of living. They should consider well the nature of such disease, and guard against it by proper regimen. It it is certain, that family diseases have often, by proper care, been kept off for one generation; and there is reason to believe that, by persisting in the same course, such diseases might at length be wholly eradicated. This is a subject very little regarded, though of the greatest importance. Family constitutions are as capable of improvement as family estates; and the libertine who impairs the one,

* The Jews, by their laws, were, in certain cases, forbid to have any manner of commerce with the diseased: and indeed to this all wise legislators ought to have a special regard. In some countries, diseased persons have actually been forbid to marry. This is an evil of a complicated kind, a natural deformity, a political mischief; and, therefore, requires a public consideration.

does greater injury to his poſterity than the prodigal who ſquanders away the other.

Of the Clothing of Children.

The clothing of an infant is ſo ſimple a matter, that it is ſurpriſing how any perſons ſhould err in it; yet many children loſe their lives, and others are deformed by inattention to this article.

Nature knows of no uſe of clothes to an infant, but to keep it warm. All that is neceſſary for this purpoſe, is to wrap it in a ſoft looſe covering. Were a mother left to the dictates of Nature alone, ſhe would certainly purſue this courſe. But the buſineſs of dreſſing an infant has long been out of the hands of mothers, and has at laſt become a ſecret which none but adepts pretend to underſtand.

From the moſt early ages it has been thought neceſſary, that a woman in labour ſhould have ſome perſon to attend her. This in time becomes a buſineſs; and, as in all others, thoſe who were employed in it ſtrove to outdo one another in the different branches of their profeſſion. The dreſſing of a child came of courſe to be conſidered as the midwife's province; who no doubt imagined that the more dexterity ſhe could ſhew in this article, the more her ſkill would be admired. Her attempts were ſeconded by the vanity of parents, who too often deſirous of making a ſhew of the infant as ſoon as it was born, were ambitious to have as much finery heaped upon it as poſſible. Thus it came to be thought as neceſſary for a midwife to excel in bracing and dreſſing an infant, as for a ſurgeon to be expert in applying bandages to a broken limb; and the poor child, as ſoon as it came into the world, had as many rollers and wrappers applied to its body, as if every bone had been fractured in the birth; while theſe were often ſo tight, as not only to gall and wound its tender frame, but even to obſtruct the motion of the heart, lungs, and other organs neceſſary for life.

In moſt parts of Britain, the practice of rolling children with ſo many bandages, is now, in ſome meaſure, laid aſide; but it would ſtill be a difficult taſk to perſuade the generality of mankind, that the ſhape of an infant does not entirely depend on the care of the midwife. So far, however, are all her endeavours to mend the ſhape from being ſucceſsful, that they conſtantly operate the contrary way, and mankind become deformed juſt in proportion to the means uſed to prevent it. How little deformity of body is to be found among uncivilized nations! So little indeed, that it is vulgarly believed they put all their deformed children to death. The truth is they hardly know ſuch a thing as a deformed child. Neither ſhould we if we followed their example. Savage nations never think of manacling their children. They allow them the full uſe of every organ, carry them abroad in the open air, waſh their bodies daily in cold water, &c. By this management their children become ſo ſtrong and hardy, that by the time our puny infants get out of the nurſe's arms, theirs are able to ſhift for themſelves §.

Among brute animals, no art is neceſſary to procure a fine ſhape. Though many of them are extremely delicate when they come into the world, yet we never find them grow crooked for want of ſwaddling bands. Is Nature leſs generous to the human kind! No; but we take the buſineſs out of Nature's hands.

Not only the analogy of other animals, but the very feelings of infants tell us, they ought to be kept eaſy and free from all preſſure. They cannot indeed tell their complaints; but they can ſhew ſigns of pain; and this they never fail to do, by crying when hurt by their clothes. No ſooner are they freed from their bracings, than they ſeem pleaſed and happy; yet, ſtrange infa-

§ A friend of mine, who was several years on the coast of Africa, tells me, that the natives neither put any clothes upon their children nor apply to their bodies bandages of any kind, but lay them on a pallet, and suffer them to tumble about at pleasure; yet they are all straight and seldom have any disease.

tuation! the moment they hold their peace, they are again committed to their chains.

If we conſider the body of an infant as a bundle of ſoft pipes, replenifhed with fluids in continual motion, the danger of preſſure will appear in the ſtrongeſt light. Nature in order to make way for the growth of children, has formed their bodies ſoft and flexible; and leſt they ſhould receive any injury from preſſure in the womb, has ſurrounded the fœtus every where with fluids. This ſhews the care which Nature takes to prevent all unequal preſſure on the bodies of infants, and to defend them againſt every thing that might in the leaſt cramp or confine their motions.

Even the bones of an infant are ſo ſoft and cartilaginous, that they readily yield to the ſlighteſt preſſure, and eaſily aſſume a bad ſhape, which can never after be remedied. Hence it is, that ſo many people appear with high ſhoulders, crooked ſpines, and flat breaſts, who were as well proportioned at their births as others, but had the misfortune to be ſqueezed out of ſhape by the application of ſtays and bandages.

Preſſure, by obſtructing the circulation, likewiſe prevents the equal diſtribution of nouriſhment to the different parts of the body, by which means the growth becomes unequal. One part grows too large, while another remains too ſmall; and thus in time the whole frame becomes diſproportioned and miſhapen. To this we muſt add that when a child is cramped in its clothes, it naturally ſhrinks from the part that is hurt: and by putting its body into unnatural poſtures, it becomes deformed by habit.

Deformity of body may indeed proceed from weakneſs or diſeaſe; but in general, it is the effect of improper clothing. Nine-tenths, at leaſt, of the deformity among mankind, muſt be imputed to this cauſe. A deformed body is not only diſagreeable to the eye, but by a bad figure both the animal and vital functions muſt be impeded, and of courſe health impaired. Hence few people remarkaby miſhapen are ſtrong or healthy.

The new motions which commence at the birth, as the circulation of the whole maſs of blood through the lungs, reſpiration, the periſtaltic motion, &c. afford another ſtrong argument for keeping the body of an infant free from all preſſure. Theſe organs, not having been accuſtomed to move, are eaſily ſtopped; but when this happens, death muſt enſue. Hardly any method could be deviſed more effectually to ſtop theſe motions, than bracing the body too tight with rollers † and bandages. Were theſe to be applied in the ſame manner to the body of an adult for an equal length of time, they would hardly fail to hurt the digeſtion and make them ſick. How much more hurtful they muſt prove to the tender bodies of infants, we ſhall leave any one to judge.

Whoever conſiders theſe things will not be ſurpriſed that ſo many children die of convulſions ſoon after the birth. Theſe fits are generally attributed to ſome inward cauſe; but in fact they oftener proceed from our own imprudent conduct. I have known a child ſeized with convulſion fits ſoon after the midwife had done ſwaddling it, who upon taking off the rollers and bandages, was immediately relieved and never had the diſeaſe afterwards. Numerous examples of this might be given, were they neceſſary.

It would be ſafer to faſten the clothes of an infant with ſtrings than pins, as theſe often gall and irritate their tender ſkins, and occaſion diſorders. Pins have been found ſticking above half an inch into the body of a child, after it had died of convulſion fits, which in all probability proceeded from that cauſe.

Children are not only hurt by the tightneſs of their clothes, but alſo by the quantity. Every child has ſome degree of fever after the birth; and if it be loaded with too many clothes, the fever muſt be increaſed. But this is not all; the child is generally laid in bed

† This is by no means inveighing against a thing that does not happen. In many parts of Britain at this day a roller, eight or ten feet in length, is applied tightly round the child's body as soon as it is born.

with the mother, who is often likewiſe feveriſh; to which we may add the heat of the bed-chamber, the wine, and other heating things, too frequently given to children immediately after the birth. When all theſe are combined, which does not ſeldom happen, they muſt increaſe the fever to ſuch a degree as will endanger the life of the infant.

The danger of keeping infants too hot will further appear, if we conſider that, after they have been for ſometime in the ſituation mentioned above, they are often ſent into the country to be nurſed in a cold houſe. Is it any wonder, if a child, from ſuch a tranſition, catches a mortal cold, or contracts ſome other fatal diſeaſe? When an infant is kept too hot, its lungs, not being ſufficiently expanded, are apt to remain weak and flaccid for life; hence proceeds coughs, conſumptions and other diſeaſes of the breaſt.

It would anſwer little purpoſe to ſpecify the particular ſpecies of dreſs proper for an infant. Theſe will always vary in different countries, according to cuſtom and the humour of parents. The great rule to be obſerved is, *That a child have no more clothes than are neceſſary to keep it warm, and that they be quite eaſy for its body.*

Stays are the very bane of infants. A volume would not ſuffice to point out all the bad effects of this ridiculous piece of dreſs both on children and adults. The madneſs in favour of ſtays ſeems, however, to be ſomewhat abated; and it is to be hoped the world will, in time, become wiſe enough to know, that the human ſhape does not ſolely depend upon whale-bone and bend leather *.

* Stays made of bend leather are worn by all the women of lower ſtation in many parts of England.

I am ſorry to underſtand, that there are ſtill mothers mad enough to lace their daughters very tight in order to improve their ſhape. As reaſoning would be totally loſt upon ſuch people, I ſhall beg leave juſt to aſk them, Why there are ten deformed women for one man? and likewiſe to recommend to their perſual a ſhort moral precept, which forbids us to deform the human body.

I ſhall only add with reſpect to the clothes of children, that they ought to be kept thoroughly clean. Children perſpire more than adults; and if their clothes be not frequently changed, they become very hurtful. Dirty clothes not only gall and fret the tender ſkins of infants, but likewiſe occaſion ill ſmells: and what is worſe, tend to produce vermin and cutaneous diſeaſes.

Cleanlineſs is not only agreeable to the eye, but tends greatly to preſerve the health of children. It promotes perſpiration, and, by that means, frees the body from ſuperfluous humours, which, if retained, could not fail to occaſion diſeaſes. No mother or nurſe can have any excuſe for allowing a child to be dirty. Poverty may oblige her to give it coarſe clothes; but if ſhe does not keep them clean, it muſt be her own fault.

Of the Food of Children.

Nature not only points out the food proper for an infant, but actually prepares it. This, however, is not ſufficient to prevent ſome who think themſelves wiſer than Nature, from attempting to bring up their children without her proviſion. Nothing can ſhew the diſpoſition which mankind have to depart from Nature more than their endeavouring to bring up children without the breaſt. The mother's milk, or that of a healthy nurſe, is unqueſtionably the beſt food for an infant. Neither Art nor Nature can afford a proper ſubſtitute for it. Children may ſeem to thrive for a few months without the breaſt; but when teething, the ſmall-pox, and other diſeaſes incident to childhood, come on, they generally periſh.

A child, ſoon after the birth, ſhows an inclination to ſuck; and there is no reaſon why it ſhould not be gratified. It is true, the mother's milk does not always come immediately after the birth; but this is the way to bring it: beſides, the firſt milk that the child can ſqueeze out of the breaſt anſwers the purpoſe of cleanſ-

ing, better than all the drugs in the apothecary's ſhop, and at the ſame time prevents inflammations of the breaſt, fevers and other diſeaſes incident to mothers.

It is ſtrange how people came to think that the firſt thing given to a child ſhould be drugs. This is beginning with medicine by times, and no wonder if they generally end with it. It ſometimes happens, indeed, that a child does not diſcharge the meconium, ſo ſoon as could be wiſhed; this has induced phyſicians, in ſuch caſes, to give ſomething of an opening nature to cleanſe the firſt paſſages. Midwives have improved upon this hint, and never fail to give ſyrups, oils, &c. whether they be neceſſary or not. Cramming an infant with ſuch indigeſtible ſtuff as ſoon as it is born, can hardly fail to make it ſick, and is more likely to occaſion diſeaſes than to prevent them. Children are ſeldom long after the birth without having paſſage both by ſtool and urine; though theſe evacuations may be wanting for ſome time without any danger. But if chidren muſt have ſome thing before they be allowed the breaſt, let it be a little thin water pap, to which may be added an equal quantity of new milk; or rather water alone, with the addition of a little raw ſugar. If this be given without any wine or ſpiceries, it will neither heat the blood, load the ſtomach, nor occaſion gripes.

Upon the firſt ſight of an infant, almoſt every perſon is ſtruck with the idea of its being weak, feeble, and wanting ſupport. This naturally ſuggeſts the need of cordials. Accordingly wines are univerſally mixed with the firſt food of children. Nothing can be more fallacious than this way of reaſoning, or more hurtful to infants than the conduct founded upon it. Children require very little food for ſome time after the birth; and what they receive ſhould be thin, weak, light, and of a cooling quality. A very ſmall quantity of wine is ſufficient to heat and inflame the blood of an infant; but every perſon converſant in theſe matters muſt know that moſt of the diſeaſes of infants proceed from the heat of their humours.

If the mother or nurſe has enough milk, the child

will need little or no other food before the third or fourth month. It will then be proper to give it, once or twice a day, a little of ſome food that is eaſy of digeſtion, as water pap, milk pottage, weak broth with bread in it, and ſuch like. This will eaſe the mother, will accuſtom the child by degrees to take food, and will render the weaning both leſs difficult and leſs dangerous. All great and ſudden tranſitions are to be avoided in nurſing. For this purpoſe, the food of children ought not only to be ſimple, but to reſemble, as nearly as poſſible, the properties of milk. Indeed milk itſelf ſhould make a principal part of their food, not only before they are weaned, but for ſome time after.

Next to milk, we would recommend good light bread. Bread may be given to a child as ſoon as it ſhews an inclination to chew; and it may at all times be allowed as much plain bread as it will eat. The very chewing of bread will promote the cutting of the teeth, and the diſcharge of ſaliva, while, by mixing with the nurſe's milk in the ſtomach, it will afford an excellent nouriſhment. Children diſcover an early inclination to chew whatever is put into their hands. Parents obſerve the inclination, but generally miſtake the object. Inſtead of giving the child ſomething which may at once exerciſe its gums and afford it nouriſhment, they commonly put into its hands a piece of hard metal, or impenetrable coral. A cruſt of bread is the beſt gum ſtick. It not only anſwers the purpoſe better than any thing elſe, but has the additional properties of nouriſhing the child and carrying the ſaliva down to the ſtomach, which is too valuable a liquor to be loſt.

Bread, beſides being uſed dry, may be many ways prepared into food for children. One of the beſt methods is to boil it in water, afterwards pouring the water off, and mixing with the bread a proper quantity of new milk unboiled. Milk is both more wholeſome and nouriſhing this way than boiled, and is leſs apt to occaſion coſtiveneſs. For a child farther advanced,

bread may be mixed in veal or chicken broth, made into puddings, or the like. Bread is a proper food for children at all times, provided it be plain, made of wholeſome grain, and well fermented; but when enriched with fruits, ſugars, or ſuch things, it becomes very unwholeſome.

It is ſoon enough to allow children animal food when they have got teeth to eat it. They ſhould never taſte it till after they are weaned, and even then they ought to uſe it ſparingly. Indeed, when hildren live wholly on vegetable food, it is apt to be ſour on their ſtomachs; but on the other hand, too much fleſh heats the body, and occaſions fevers and other inflammatory diſeaſes. This plainly points out a due mixture of animal and vegetable food as moſt proper for children.

Few things prove more hurtful to infants than the common method of ſweetening their food. It entices them to take more than they ought to do, which makes them grow fat and bloated. It is pretty certain, if the food of children were quite plain, that they would never take more than enough. Their exceſſes are entirely owing to nurſes. If a child be gorged with food at all hours, and enticed to take it, by making it ſweet and agreeable to the palate, is it any wonder that ſuch a child ſhould in time be induced to crave more food than it ought to have?

Children may be hurt by too little as well as too much food. After a child is weaned, it ought to be fed four or five times a day; but it ſhould not have too much at a time. Children thrive beſt with ſmall quantities of food frequently given. This neither overloads the ſtomach nor hurts the digeſtion, and is certainly moſt agreeable to nature.

Writers on nurſing have inveighed with ſuch vehemence againſt giving children too much food, that many parents, by endeavouring to ſhun that error, have run into the oppoſite extreme, and ruined the conſtitutions of their children. But the error of pinching children in their food is more hurtful than the other extreme.

Nature has many ways of relieving herſelf when over-charged; but a child, who is pinched with hunger, will never become a ſtrong or healthy man. That errors are frequently committed on both ſides, we are ready to acknowledge; but where one child is hurt by the quantity of its food, ten ſuffer from the quality. This is the principal evil, and claims our ſtricteſt attention.

Many people imagine, that the food which they themſelves love cannot be bad for their children: but this notion is very abſurd. In the more advanced periods of life we often acquire an inclination for food, which when children we could not endure. Beſides, there are many things that by habit may agree very well with the ſtomach of a grown perſon, which would be hurtful to a child: as high-ſeaſoned, ſalted, and ſmoke-dried proviſions, &c. It would alſo be improper to feed children with fat meat, ſtrong broths, rich ſoups, or the like.

All ſtrong liquors are hurtful to children. Some parents teach their children to guzzle ale, and other fermented liquors, at every meal. Such a practice cannot fail to do miſchief. Theſe children ſeldon eſcape the violence of the ſmall pox, meaſles, hooping-cough, or ſome inflammatory diſorder. Milk, water, butter-milk, or whey, are the moſt proper for children to drink. If they have any thing ſtronger, it may be fine ſmall beer, or a little wine mixed with water. The ſtomachs of children can digeſt well enough without the aſſiſtance of warm ſtimulants: beſides being naturally hot, they are eaſily hurt by every thing of a heating quality.

Few things are more hurtful to children than unripe fruits. They weaken the powers of digeſtion, and ſour and relax the ſtomach, by which means it becomes a proper neſt for inſects. Children indeed ſhew a great inclination for fruit, and I am apt to believe, that if good ripe fruit were allowed them in proper quantity, it would have no bad effects. We never find a natural inclination wrong, if properly regulated. Fruits are generally of a cooling nature, and correct the heat and

acrimony of the humours. This is what moſt children require; only care ſhould be taken leſt they exceed. Indeed the beſt way to prevent children from going to exceſs in the uſe of fruit, or eating that which is bad, is to allow them a proper quantity of what is good ||.

Roots which contain a crude viſcid juice ſhould be ſparingly given to children. They fill the body with groſs humours, and tend to produce eruptive diſeaſes. This caution is particularly neceſſary for the poor; glad to obtain at a ſmall price, what will fill the bellies of their children, they ſtuff them two or three times a day with crude vegetables. Children had better eat a ſmaller quantity of food which yields a wholeſome nouriſhment, than be crammed with what their digeſtive powers are unable properly to aſſimilate.

Butter ought likewiſe to be ſparingly given to children. It both relaxes the ſtomach, and produces groſs humours. Indeed, moſt things that are fat oily have this effect. Butter when ſalted becomes ſtill more hurtful. Inſtead of butter, ſo liberally given to children in moſt parts of Britain, we would recommend honey. Children who eat honey are ſeldom troubled with worms: they are alſo leſs ſubject to cutaneous diſeaſes, as itch, ſcabbed heads, &c.

Many people err in thinking that the diet of children ought to be altogether moiſt. When children live entirely upon ſlops, it relaxes their ſolids, renders them weak, and diſpoſes them to the rickets, the ſcrophula, and other glandular diſorders. Relaxation is one of the moſt general cauſes of the diſeaſes of children. Every thing therefore which tends to unbrace their ſolids ought to be carefully avoided.

|| Children are always ſickly in the fruit ſeaſon, which may be thus accounted for. Two-thirds of the fruit which comes to market in this country is really unripe; and children, not being in a condition to judge for themſelves, eat whatever they can lay their hands upon, which often proves little better than poiſon to their tender bowels. Servants, and others who have the care of children, ſhould be ſtrictly forbidden to give them fruit without the knowledge of their parents.

We would not be underſtood by theſe obſervations as confining children to any particular kind of food. Their diet may be frequently varied, provided always that ſufficient regard be had to ſimplicity.

Of the Exerciſe of Children.

Of all the cauſes which conſpire to render the life of man ſhort and miſerable, none has greater influence than the want of proper EXERCISE: healthy parents, wholeſome food, and proper clothing, will avail little, where exerciſe is neglected. Sufficient exerciſe will make up for ſeveral defects in nurſing; but nothing can ſupply the want of it. It is abſolutely neceſſary to the health, the growth, and the ſtrength of children.

The deſire of exerciſe is coeval with life itſelf. Were this principle attended to, many diſeaſes might be prevented. But while indolence and ſedentary employments prevent two thirds of mankind from either taking ſufficient exerciſe themſelves, or giving it to their children, what have we to expect but diſeaſes and deformity among their offspring? The rickets, ſo deſtructive to children, never appeared in Britain till manufactures began to flouriſh, and people, attracted by the love of gain, left the country to follow ſedentary employments in great towns. It is amongſt theſe people that this diſeaſe chiefly prevails, and not only deforms but kills many of their offspring.

The conduct of other young animals ſhews the propriety of giving exerciſe to children. Every other animal makes uſe of its organs of motion as ſoon as it can, and many of them, even when under no neceſſity of moving in queſt of food, cannot be reſtrained without force. This is evidently the caſe with the calf, the lamb, and moſt other young animals. If theſe creature were not permitted to friſk about and take exerciſe, they would ſoon die or become diſeaſed. The ſame inclination appears very early in the human ſpecies; but as they are not able to take exerciſe them-

ſelves, it is the buſineſs of their parents and nurſes to aſſiſt them.

Children may be exerciſed various ways. The beſt method, while they are light, is to carry them about in the nurſe's arms †. This gives the nurſe an opportunity of talking to the child, and of pointing out every thing that may pleaſe and delight its fancy. Beſides, it is much ſafer than ſwinging an infant in a machine, or leaving it to the care of ſuch as are not fit to take care of themſelves. Nothing can be more abſurd than to ſet one child to keep another; this conduct has proved fatal to many infants, and has rendered others miſerable for life.

When children begin to walk, the ſafeſt and beſt method of leading them about is by the hands. The common way, of ſwinging them in leading-ſtrings fixed to their backs, has ſeveral bad conſequences. It makes them throw their bodies forward, and preſs with their whole weight upon their ſtomach and breaſt; by this means the breathing is obſtructed, the breaſt flattened, and the bowels compreſſed; which muſt hurt the digeſtion, and occaſion conſumptions of the lungs, and other diſeaſes.

It is a common notion, that if children be ſet upon their feet too ſoon, their legs will become crooked. There is reaſon to believe, that the very reverſe of this is true. Every member acquires ſtrength in proportion as it is exerciſed. The limbs of children are weak indeed, but their bodies are proportionably light; and had they ſkill to direct themſelves they would ſoon be able to ſupport their own weight. Who ever heard of any other animal that became crooked by uſing its legs too ſoon? Indeed, if a child be not permitted to make any uſe of its legs till a conſiderable time after the birth, and be then ſet upon them with its whole weight at once, there may be ſome danger; but this proceeds en-

† The nurſe ought to be careful to keep the child in a proper poſition; as deformity is often the conſequence of inattention to this circumſtance.

tirely from the child's not having been accuſtomed to uſe its legs from the beginning.

Mothers of the poorer ſort think they are great gainers by making their children lie or ſit while they themſelves work. In this they are greatly miſtaken. By neglecting to give their children exerciſe they are obliged to keep them a long time before they can do any thing for themſelves, and to ſpend more on medicine than would have paid for proper care.

To take care of children, is the moſt uſeful buſineſs in which even the poor can be employed; but, alas! it is not always in their power. Poverty often obliges them to neglect their offspring in order to procure the neceſſaries of life. When this is the caſe, it becomes the intereſt as well as the duty of the public to aſſiſt them. Ten thouſand times more benefit would accrue to the ſtate, by enabling the poor to bring up their own children, than from all the hoſpitals † that ever can be erected for that purpoſe.

Whoever conſiders the ſtructure of the human body, will ſoon be convinced of the neceſſity of exerciſe for the health of children. The body is compoſed of an infinite number of tubes, whoſe fluids cannot be puſhed on without the action and preſſure of the muſcles. But, if the fluids remain inactive, obſtructions muſt happen, and the humours muſt of courſe be vitiated, which cannot fail to occaſion diſeaſes. Nature has furniſhed both the veſſels which carry the blood and lymph with numerous valves, in order that the action of every muſcle might puſh forward their contents; but without ac-

† If it were made the intereſt of the poor to keep their children alive, we ſhould loſe very few of them. A ſmall premium given annually to each poor family, for every child they have alive at the year's end, would ſave more infant lives than if the whole revenue of the crown were expended on hoſpitals for that purpoſe. This would make the poor eſteem fertility a bleſſing; whereas many of them think it the greateſt curſe that can befal them: and in place of wiſhing their children to live, ſo far does poverty get the better of natural affection, that they are often very happy when they die.

tion, this admireable contrivance can have no effect. This part of the animal œconomy proves to a demonſtration the neceſſity of exerciſe for the preſervation of health.

Arguments to ſhew the importance of exerciſe might be drawn from every part of the animal œconomy; without exerciſe, the circulation of the blood cannot be properly carried on, nor the different ſecretions duly performed; without exerciſe, the fluids cannot be properly prepared, nor the ſolids rendered ſtrong or firm. The action of the heart, the motion of the lungs, and all the vital functions, are greatly aſſiſted by exerciſe. But to point out the manner in which theſe effects are produced, would lead us farther into the œconomy of the human body, than moſt of thoſe for whom this treatiſe is intended would be able to follow. We ſhall therefore only add, that when exerciſe is neglected, none of the animal functions can be duly performed; and when this is the caſe, the whole conſtitution muſt go to wreck. A good conſtitution ought certainly to be our firſt object in the management of children. It lays a foundation for their being uſeful and happy in life: and whoever neglects it, not only fails in his duty to his offſpring, but to ſociety.

One very common error of parents, by which they hurt the conſtitutions of their children, is the ſending them too young to ſchool. This is often done ſolely to prevent trouble. When the child is at ſchool, he needs no keeper. Thus the ſchool-maſter is made the nurſe; and the poor child is fixed to the ſeat ſeven or eight hours a day, which time ought to be ſpent in exerciſe and diverſions. Sitting ſo long cannot fail to produce the worſt effects upon the body; nor is the mind leſs injured. Early application weakens the faculties, and often fixes in the mind an averſion to books, which continues for life†.

† It is undoubtedly the duty of parents to inſtruct their children at leaſt till they are of an age proper to take care of themſelves

But ſuppoſe this were the way to make children ſcholars, it certainly ought not to be done at the expence of their conſtitutions. Our anceſtors, who ſeldom went to ſchool very young, were not leſs learned than we. But we imagine the boy's education will be quite marred, unleſs he be carried to ſchool in his nurſe's arms. No wonder if ſuch hot bed plants ſeldom become either ſcholars or men!

Not only the confinement of children in public ſchools, but their number, often proves hurtful. Children are much injured by being kept in crowds within doors; their breathing not only renders the place unwholeſome, but if any one of them happen to be diſeaſed, the reſt catch the infection. A ſingle child has been often known to communicate the bloody flux, the hooping cough, the itch, or other diſeaſes, to almoſt ever individual in a numerous ſchool.

But, if faſhion muſt prevail, and infants are to be ſent to ſchool, we would recommend it to teachers as they value the intereſts of ſociety, not to confine them too long at a time, but allow them to run about and play at ſuch active diverſions as may promote their growth, and ſtrengthen their conſtitutions. Were boys, inſtead of being whipped for ſtealing an hour to run, ride, ſwim, or the like, encouraged to employ a proper part of their time in these manly and uſeful exerciſes, it would have many excellent effects.

It would be of great ſervice to boys, if at a proper age, they were taught the military exerciſe. This would increaſe their ſtrength, inſpire them with courage, and when their country called for their aſſiſtance, would enable them to act in her defence, without being obliged to undergo a tedious and troubleſome courſe of inſtruc-

This would tend much to confirm the ties of parental tendreneſs and filial affection, of the want of which there are at preſent ſo many deplorable inſtances. Though few fathers have time to inſtruct their children, yet moſt mothers have; and ſurely they cannot be better employed.

tions, at a time when they are leſs fit to learn new motions, geſtures, &c *.

An effeminate education will infallibly ſpoil the beſt natural conſtitution; and if boys are brought up in a more delicate manner than even girls ought to be, they will never be men.

Nor is the common education of girls leſs hurtful to the conſtitution than that of boys. Miſs is ſet down to her frame before ſhe can put on her clothes, and is taught to believe that to excel at the needle is the only thing that can entitle her to general eſteem. It is unneceſſary here to inſiſt upon the dangerous conſequences of obliging girls to ſit too much. They are pretty well known, and are too often felt at a certain time of life. But ſuppoſing this critical period to be got over, greater dangers ſtill await them when they come to be mothers. Women who have been early accuſtomed to a ſedentary life, generally run great hazard in childbed; while thoſe who have been uſed to romp about, and take ſufficient exerciſe, are ſeldom in any danger.

One hardly meets with a girl who can at the ſame time boaſt of early performances by the needle, and a good conſtitution. Cloſe and early confinement generally occaſions indigeſtions, head achs, pale complexions, pain of the ſtomach, loſs of appetite, coughs, conſumptions of the lungs, and deformity of body. The laſt of theſe indeed is not to be wondered at, conſidering the aukward poſtures in which girls ſit at many kinds of needle work, and the delicate flexible ſtate of their bodies in the early periods of life.

Would mothers, inſtead of having their daughters inſtructed in many trifling accompliſhments, employ them in plain work and houſewifery, and allow them

* I am happy to find that the maſters of academies now begin to put in practice this advice. Each of them ought to keep a drill ſerjeant for teaching the boys the military exerciſe. This, beſides contributing to their health and vigour of body, would have many other happy effects.

ſufficient exerciſe in the open air, they would both make them more healthy mothers, and more uſeful members of ſociety. I am no enemy to genteel accompliſhments, but would have them only conſidered as ſecondary, and always diſregarded when they impair health.

Many people imagine it a great advantage for children to be early taught to earn their bread. This opinion is certainly right, provided they were ſo employed as not to hurt their health or growth; but when theſe ſuffer, ſociety, inſtead of being benefited, is a real loſer by their labour. There are few employments, except ſedentary ones, by which children may earn a livelihood; and if they be ſet to theſe too ſoon, it ruins their conſtitutions. Thus, by gaining a few years from childhood, we generally loſe twice as many in the latter period of life, and even render the perſon leſs uſeful while he does live.

In order to be ſatisfied of the truth of this obſervation, we need only look into the great manufacturing towns, where we ſhall find a puny degenerate race of people, weak and ſickly all their lives, ſeldom exceeding the middle period of life; or if they do, being unfit for buſineſs, they become a burden to ſociety. Thus arts and manufactures, though they may increaſe the riches of a country, are by no means favourable to the health of its inhabitants. Good policy would therefore require, that ſuch people as labour during life, ſhould not be ſet too early to work. Every perſon converſant in the breed of horſes, or other working animals, knows that if they be ſet to hard labour too ſoon, they never will turn out to advantage. This is equally true with reſpect to the human ſpecies.

There are, nevertheleſs, various ways of employing young people, without hurting their health. The eaſier parts of gardening, huſbandry, or any buſineſs carried on without doors, are moſt proper. Theſe are employments which moſt young people are fond of, and ſome

parts of them may always be adapted to their age, taſte, and ſtrength *.

Such parents, however, as are under the neceſſity of employing their children within doors, ought to allow them ſufficient time for active diverſions without. This would both encourage them to do more work, and prevent their conſtitutions from being hurt.

Some imagine that exerciſe within doors is ſufficient; but they are greatly miſtaken. One hour ſpent in running, or any other exerciſe without doors, is worth ten within. When children cannot go abroad, they may indeed be exerciſed at home. The beſt method of doing this, is to make them run about in a long room, or dance. This laſt kind of exerciſe, if not carried to exceſs, is of excellent ſervice to young people. It cheers the ſpirits, promotes perſpiration, ſtrengthens the limbs, &c. I knew an eminent phyſician who uſed to ſay, that he made his children dance, inſtead of giving them phyſic. It were well if more people followed his example.

The COLD BATH may be conſidered as an aid to exerciſe. By it the body is braced and ſtrengthened, the circulation and ſecretions promoted, and were it conducted with prudence, many diſeaſes, as the rickets, ſcrophula, &c. might thereby be prevented. The ancients, who took every method to render children hardy and robuſt, were no ſtrangers to the uſe of the cold bath: and, if we may credit report, the practice of immerſing children daily in cold water muſt have been very common with our anceſtors.

The greateſt objection to the uſe of the cold bath arises from the ſuperſtitious prejudices of nurſes. Theſe are often ſo ſtrong, that it is impoſſible to bring them to make a proper uſe of it. I have known ſome of them who would not dry a child's ſkin after bathing it, leſt it ſhould deſtroy the effect of the water. Others

* I have been told that in China, where the police is the best in the world, all the children are employed in the easier parts of gardening and husbandry; as weeding, gathering stones off the land, and such like.

will even put clothes dipt in the water upon the child, and either put it to bed or ſuffer it to go about in that condition. Some believe, that the whole virtue of the water depends upon its being dedicated to a particular ſaint; while others place their confidence in a certain number of dips, as three, ſeven, nine, or the like; and the world could not perſuade them, if theſe do not ſucceed, to try it a little longer. Thus, by the whims of nurſes, children loſe the benefit of the cold bath, and the hopes of the phyſician from that medicine are often fruſtrated.

We ought not, however, entirely to ſet aſide the cold bath, becauſe ſome nurſes make a wrong uſe of it. Every child, when in health, ſhould at leaſt have its extremities daily waſhed in cold water. This is a partial uſe of the cold bath, and is better than none. In winter this may ſuffice; but, in the warm ſeaſon, if a child be relaxed, or ſeem to have a tendency to the rickets or ſcrophula, its whole body ought to be frequently immerſed in cold water. Care, however, muſt be taken not to do this when the body is hot, or the ſtomach full. The child ſhould be dipped only once at a time, ſhould be taken out immediately, and have its ſkin well rubbed with a dry cloth.

The bad Effects of unwholeſome Air upon Children.

Few things prove more deſtructive to children than confined or unwholeſome air. This is one reaſon why ſo few of thoſe infants, who are put into hoſpitals, or pariſh workhouſes, live. Theſe places are generally crowded with old, ſickly, and infirm people; by which means the air is rendered ſo extremely pernicious, that it becomes a poiſon to infants.

Want of wholeſome air is likewiſe deſtructive to many poor children born in great towns. There the poorer ſort of inhabitants live in low, dirty, confined houſes, to which the freſh air has hardly any acceſs. Though grown people, who are hardy and robuſt, may live in ſuch ſituations, yet they generally prove fatal to

their offspring, few of whom arrive at maturity, and thoſe who do are weak and deformed. As ſuch people are not in a condition to carry their children abroad into the open air, we muſt lay our account with loſing the greater part of them. But the rich have not this excuſe. It is their buſineſs to ſee that their children be daily carried abroad, and that they be kept in the open air for a ſufficient time. This will always ſucceed better if the mother goes along with them. Servants are often negligent in theſe matters, and allow a child to ſit or lie on the damp ground, inſtead of leading or carrying it about. The mother ſurely needs air as well as her children; and how can ſhe be better employed than in attending them?

A very bad cuſtom prevails, of making children ſleep in ſmall apartments, or crowding two or three beds into one chamber. Inſtead of this, the nurſery ought always to be the largeſt and beſt aired room in the houſe. When children are confined in ſmall apartments, the air not only becomes unwholeſome, but the heat relaxes their ſolids, renders them delicate, and diſpoſes them to colds and many other diſorders. Nor is the cuſtom of wrapping them up too cloſe in cradles leſs pernicious. One would think that nurſes were afraid leſt children ſhould ſuffer by breathing in the air, as many of them actually cover the child's face while aſleep, and others wrap a covering over the whole of the cradle, by which means the child is forced to breathe the ſame air over and over all the time it ſleeps. Cradles indeed are on many accounts hurtful to children, and it would be better if the uſe of them were totally laid aſide ‡.

‡ It is amazing how children escape ſuffocation, conſidering the manner in which they are often rolled up in flannels, &c. I lately attended an infant, whom I found muffled up over head and ears in many folds of flannel, though it was in the middle of June. I begged for a little free air to the poor babe; but though this indulgence was granted during my ſtay, I found it always on my return in the ſame ſituation. Death, as might be expected, ſoon freed the infant from all its miſeries: but it was not in my power to free the minds of its parents from the prejudices which proved fatal to their child.

A child is generally laid to ſleep with all it clothes on; and if a number of others are heaped above them, it muſt be overheated; by which means it cannot fail to catch cold on being taken out of the cradle, and expoſed to the open air with only its uſual clothing, which is too frequently the caſe.

Children who are kept within doors all day, and ſleep all night in warm cloſe apartments, may, with great propriety be compared to plants, nurſed in a hot-houſe, inſtead of the open air. Though ſuch plants may by this means be kept alive for ſome time, they will never arrive at that degree of ſtrength, vigour, and magnitude, which they would have acquired in the open air, nor would they be able to bear it afterwards, ſhould they be expoſed to it.

Children brought up in the country, who have been accuſtomed to open air, ſhould not be too early ſent to great towns, where it is confined and unwholeſome. This is frequently done with a view to forward their education, but proves very hurtful to their health. All ſchools and ſeminaries of learning ought, if poſſible, to be ſo ſituated as to have freſh, dry, wholeſome air, and ſhould never be too much crowded.

Without entering into a detail of the particular advantages of wholeſome air to children, or of the bad conſequences which proceed from the want of it, I ſhall only obſerve, that of ſeveral thouſands of children which have been under my care, I do not remember one inſtance of a ſingle child who continued healthy in a cloſe confined ſituation; but have often known the moſt obſtinate diſeaſes cured by removing them from ſuch a ſituation to an open free air.

Of Nurſes.

It is not here intended to lay down rules for the choice of nurſes. This would be waſting time. Common ſenſe will direct every one to chooſe a woman who

is healthy, and has plenty of milk *. If ſhe be at the ſame time cleanly, careful, and good-natured, ſhe can hardly fail to make a proper nurſe. After all, however, the only certain proof of a good nurſe, is a healthy child upon her breaſt. But, as the miſconduct of nurſes often proves more fatal to children, it will be of importance to point out a few of their moſt baneful errors, in order to rouſe the attention of parents, and to make them look more ſtrictly into the conduct of thoſe to whom they commit the care of their infant offspring.

Though it admits of ſome exceptions, yet we may lay it down as a general rule, *That every woman who nurſes for hire ſhould be carefully looked after, otherwiſe ſhe will not do her duty.* For this reaſon parents ought always to have their children nurſed under their own eye, if poſſible; and where this cannot be done, they ſhould be extremely circumſpect in the choice of thoſe perſons to whom they intruſt them. It is a folly to imagine that a woman, who abandons her own child to ſuckle another for the ſake of gain, ſhould feel all the affections of a parent towards her nurſling; yet ſo neceſſary are theſe affections in a nurſe, that, but for them, the human race would be ſoon extinct.

One of the moſt common faults of thoſe who nurſe for hire, is to doſe the children with ſtupefactives, or ſuch things as lull them to ſleep. An indolent nurſe, who does not give a child ſufficient exerciſe in the open air to make it ſleep, and does not chooſe to be diſturbed by it in the night, will ſeldom fail to procure for it a doſe of laudanum, diacodium, ſaffron, or what anſwers the ſame purpoſe, a dram of ſpirits or other ſtrong liquors. Theſe, though they may be poiſon to infants, are every day adminiſtered by many who bear the character of very good nurſes †.

* I have often known people ſo impoſed upon, as to give an infant to a nurſe to be ſucked who had not one drop of milk in her breaſt.

† If a mother on viſiting her child at nurſe finds it always aſleep, I would adviſe her to remove it immediately, otherwiſe it will ſoon ſleep its laſt.

A nurſe who has not milk enough is apt to imagine that this defect may be ſupplied by giving the child wines, cordial waters, or other ſtrong liquors. This is an egregious miſtake. The only thing that has any chance to ſupply the place of the nurſe's milk, muſt be ſomewhat nearly of the ſame quality, as cow's milk, aſs's milk, or the like, with good bread. It never can be done by the help of ſtrong liquors. Theſe, inſtead of nouriſhing the infant, never fail to produce the contrary effect.

Children are often hurt by nurſes ſuffering them to cry long and vehemently. This ſtrains their tender bodies, and frequently occaſions ruptures, inflammations, of the throat, lungs, &c. A child never continues to cry long without ſome cauſe, which might always be diſcovered by proper attention; and the nurſe who can hear an infant cry till it has almoſt ſpent itſelf, without endeavouring to pleaſe it, muſt be cruel indeed, and is unworthy to be truſted with the care of any human creature.

Nurſes who deal much in medicine are always to be ſuſpected. They truſt to it, and neglect their duty. I never knew a good nurſe who had her Godfrey's cordial, Daffy's elixirs, &c. at hand. Such generally imagine, that a doſe of medicine will make up for all the defects in food, air, exerciſe, and cleanlineſs.

Allowing children to continue long wet, is another very pernicious cuſtom of indolent nurſes. This is not only diſagreeable, but it galls and frets the infant, and, by relaxing the ſolids, occaſions ſcrophulas, rickets, and other diſeaſes. A dirty nurſe is always to be ſuſpected.

Nature often attempts to free the bodies of children from bad humours, by throwing them upon the ſkin: by this means fevers and other diſeaſes are prevented. Nurſes are apt to miſtake ſuch critical eruptions for an itch, or ſome other infectious diſorder. Accordingly they take every method to drive them in. In this way

many children loſe their lives; and no wonder, as Nature is oppoſed in the very method ſhe takes to relieve them. It ought to be a rule, which every nurſe ſhould obſerve, never to ſtop any eruption without proper advice, or being well aſſured that it is not of a critical nature. At any rate, it is never to be done without previous evacuations.

Looſe ſtools is another method by which Nature often prevents or carries off the diſeaſes of infants. If theſe proceed too far, no doubt they ought to be checked; but this is never to be done without the greateſt caution. Nurſes, upon the firſt appearance of looſe ſtools, frequently fly to the uſe of aſtringents, or ſuch things as bind the body. Hence inflammatory fevers, and other fatal diſeaſes, are occaſioned. A doſe of rhubarb, a gentle vomit, or ſome other evacuation, ſhould always precede the uſe of aſtringent medicines.

One of the greateſt faults of nurſe's is, concealing the diſeaſes of children from their parents. This they are extremely ready to do, eſpecially when the diſeaſe is the effect of their own negligence. Many inſtances might be given of peſons who have been rendered lame for life by a fall from the nurſe's arms, which ſhe, through fear, concealed till the misfortune was paſt cure. Every parent who intruſts a nurſe with the care of a child, ought to give her the ſtricteſt charge not to conceal the moſt trifling diſorder or misfortune that may befal it.

We can ſee no reaſon why a nurſe, who conceals any misfortune which happens to a child under her care, till it loſes its life or limbs, ſhould not be puniſhed. A few examples of this kind would ſave the lives of many infants; but as there is little reaſon to expect that it ever will be the caſe, we would earneſtly recommend it to all parents to look carefully after their children, and not to truſt ſo valuable a treaſure entirely in the hands of an hireling.

No perſon ought to imagine theſe things unworthy of his attention. On the proper management of children depend not only their health and uſefulneſs in life, but likewiſe the ſafety and proſperity of the ſtate to which they belong. Effeminacy ever will prove the ruin of

any ſtate where it prevails; and when its foundations are laid in infancy, it can never afterwards be wholly eradicated. Parents who love their offspring, and wiſh well to their country, ought, therefore, in the management of their children, to avoid every thing that may have a tendancy to make them weak or effeminate, and to take every method in their power to render their conſtitutions ſtrong and hardy.

——By arts like these
Laconia nurs'd of old her hardy sons;
And Rome's unconquer'd legions urg'd their way,
Unhurt, thro' every toil in every clime. ARMSTRONG.

CHAP. II.

ON THE LABORIOUS, THE SEDENTARY, AND THE STUDIOUS.

THAT men are expoſed to particular diſeaſes from the occupations which they follow, is a fact well known; but to remedy this evil is a matter of ſome difficulty. Moſt people are under the neceſſity of following thoſe employments to which they have been bred, whether they be favourable to health or not. For this reaſon, inſtead of inveighing, in a general way as ſome authors have done, againſt thoſe occupations which are hurtful to health, we ſhall endeavour to point out the circumſtances in each of them from which the danger chiefly ariſes, and to propoſe the moſt rational methods of preventing it.

Chymiſts, founders, forgers, glaſs-makers, and ſeveral other artiſts, are hurt by the unwholeſome air which they are oblige to breathe. The air is not only loaded with the noxious exhalations ariſing from metals and minerals, but it is ſo charged with phlogiſton as to be rendered unfit for expanding the lungs ſufficiently,

and anſwering the other important purpoſes fo reſpiration. Hence proceed aſthmas, coughs, and conſumptions of the lungs, ſo incident to perſons who follow theſe employments

To prevent ſuch conſequences as far as poſſible, the places where theſe occupations are carried on ought to be conſtructed in ſuch a manner as to diſcharge the ſmoke and other exhalations, and admit a free current of freſh air. Such artiſts ought never to continue long at work; and when they give over, they ſhould ſuffer themſelves to cool gradually, and put on their clothes before they go into the open air. They ought never to drink large quantities of cold, weak, or watery liquors while their bodies are hot, nor to indulge in raw fruits, ſalads, or any thing that is cold on the ſtomach.

Miners, and all who work under ground, are likewiſe hurt by unwholeſome air. The air by its ſtagnation in deep mines, not only loſes its proper ſpring and other qualities neceſſary for reſpiration, but is often loaded with ſuch noxious exhalations as to become a moſt deadly poiſon.

The two kinds of air which prove moſt deſtructive to miners, are what they call the *fire damp*, and the *choke damp*. In both caſes the air becomes a poiſon by its being loaded with phlogiſton. The danger from the former may be obviated by making it explode before it accumulates in too great quantities; and the latter may be generally carried off by promoting a free circulation of air in the mine.

Miners are not only hurt by unwholeſome air, but likewiſe by the particles of metal which adhere to their ſkin, clothes, &c. Theſe are abſorbed, or taken up into the body, and occaſion palſies, vertigoes, and other nervous affections, which often prove fatal. Fallopius obſerves, that thoſe who work in mines of mercury ſeldom live above three or four years. Lead, and ſeveral other metals, are likewiſe very pernicious to the health.

Miners ought never to go to work faſting; nor to continue too long at work. Their food ought to be

nouriſhing, and their liquor generous: nothing more certainly hurts them than living too low. They ſhould by all means avoid coſtiveneſs. This may either be done by chewing a little rhubarb, or taking a ſufficient quantity of ſalad oil. Oil not only opens the body, but ſheaths and defends the inteſtines from the ill effects of the metals. All who work in mines or metals ought to waſh carefully, and change their clothes as ſoon as they give over working. Nothing would tend more to preſerve the health of ſuch people, than a ſtrict and almoſt religious regard to cleanlineſs.

Plumbers, painters, gilders, ſmelters, makers of white lead, and many others who work in metals, are liable to the ſame diſeaſes as miners; and ought to obſerve the ſame directions for avoiding them.

Tallow-chandlers, boilers of oil, and all who work in putrid animal ſubſtances, are likewiſe liable to ſuffer from the unwholeſome ſmells or effluvia of theſe bodies. They ought to pay the ſame regard to cleanlineſs as miners; and when they are affected with nauſea, ſickneſs, or indigeſtion, we would adviſe them to take a vomit or a gentle purge. Such ſubſtances ought always to be manufactued as ſoon as poſſible. When long kept, they not only become unwholeſome to thoſe who manufacture them, but likewiſe to people who live in the neighbourhood.

It would greatly exceed the limits of this part of our ſubject, to ſpecify the diſeaſes peculiar to perſons of every occupation; we ſhall therefore conſider mankind under the general claſſes of *Laborious*, *Sedentary*, and *Studious*.

THE LABORIOUS.

Though thoſe who follow laborious employments are in general the moſt healthy of mankind, yet the nature of their occupations, and the places where they are carried on, expoſe them more particularly to ſome diſeaſes. Huſbandmen, for example, are expoſed to all the viciſſitudes of the weather, which in this country,

are often very great and ſudden, and occaſion colds, coughs, quinſies, rheumatiſms, fevers, and other acute diſorders. They are likewiſe forced to work hard, and often to carry burdens above their ſtrength, which, by overſtraining the veſſels, occaſion aſthmas, ruptures, pleuriſies, &c.

Thoſe who labour without doors are often afflicted with intermitting fevers or agues, occaſioned by the frequent viciſſitudes of heat and cold, poor living, bad water, ſitting or lying on the damp ground, evening dews, night air, &c. to which they are frequently expoſed.

Such as bear heavy burdens, as porters, labourers, &c. are obliged to draw in the air with much greater force, and alſo to keep their lungs diſtended with more violence than is neceſſary for common reſpiration; by this means the tender veſſels of the lungs are overſtretched, and often burſt, inſomuch that a ſpitting of blood or fever enſues. Hippocrates mentions an inſtance to this purpoſe, of a man who, upon a wager, carried an aſs; but was ſoon after ſeized with a fever, a vomiting of blood, and a rupture.

Carrying heavy burdens is generally the effect of mere lazineſs, which prompts people to do at once what ſhould be done at twice. Sometimes it proceeds from vanity or emulation. Hence it is, that the ſtrongeſt men are moſt commonly hurt by heavy burdens, hard labour or feats of activity. It is rare to find one who boaſts of his ſtrength without a rupture, a ſpitting of blood, or ſome other diſeaſe, which he reaps as the fruit of his folly. One would imagine the daily inſtances we have of the fatal effects of carrying great weights, running, wreſtling, and the like, would be ſufficient to prevent ſuch practices.

There are indeed ſome employments which neceſſarily require a great exertion of ſtrength; as porters, blackſmiths, carpenters, &c. None ought to follow theſe but men of ſtrong body; and they ſhould never exert their ſtrength to the utmoſt, nor work too long. When the muſcles are violently ſtrained, frequent reſt

is neceſſary in order that they may recover their tone: without this, the ſtrength and conſtitution will be ſoon worn out, and premature old age be induced.

The ereſipelas, or St. Anthony's fire, is a diſeaſe very incident to the laborious. It is occaſioned by whatever gives a ſudden check to the perſpiration, as drinking cold water when the body is warm, wet feet, keeping on wet clothes, ſitting or lying on the damp ground, &c. It is impoſſible for thoſe who labour without doors always to guard againſt theſe inconveniences: but it is known from experience, that their ill conſequences might often be prevented by proper care.

The iliac paſſion, the colic, and other complaints of the bowels, are often occaſioned by the ſame cauſes as the ereſipelas; but they may likewiſe proceed from flatulent and indigeſtible food. Labourers generally eat unfermented bread, made of peas, beans, rye, and other windy ingredients. They alſo devour great quantities of unripe fruits, baked, ſtewed, or raw, with various kinds of roots and herbs, upon which they drink ſour milk, ſtale ſmall beer, or the like. Such a mixture cannot fail to fill the bowels with wind, and occaſion diſeaſes of thoſe parts.

Inflammations, whitloes, and other diſeaſes of the extremities, are likewiſe common with thoſe who labour without doors. Theſe diſeaſes are often attributed to venom or ſome kind of poiſon: but they generally proceed either from ſudden heat after cold, or the contrary. When labourers, milk-maids, &c. come from the field, cold or wet, they run to the fire, and often plunge their hands in warm water: by which means the blood and other humours in thoſe parts are ſuddenly expanded, and, the veſſels not yielding ſo quickly, a ſtrangulation happens, and an inflammation or a mortification enſues.

When ſuch perſons come home cold, they ought to keep at a diſtance from the fire for ſome time, to waſh their hands in cold water, and to rub them well with a dry cloth. It ſometimes happens, that people are ſo benumbed with cold, as to be quite deprived of the

uſe of their limbs. In this caſe the only remedy is to rub the parts affected with ſnow, or, where it cannot be had, with cold water. If they be held near the fire, or plunged into warm water, a mortification will generally enſue.

Labourers in the hot ſeaſon are apt to lie down and ſleep in the ſun. This practice is ſo dangerous, that they often wake in a burning fever. Theſe ardent fevers, which prove ſo fatal about the end of ſummer, and beginning of autumn, are frequently occaſioned by this means. When labourers leave off work, which they ought always to do during the heat of the day, they ſhould go home, or at leaſt get under ſome cover, where they may repoſe themſelves in ſafety.

Many people follow their employments in the fields from morning to night, without eating any thing. This cannot fail to hurt their health. However homely their fare be, they ought to have it at regular times; and the harder they work the more frequently they ſhould eat. If the humours be not frequently repleniſhed with freſh nouriſhment, they frequently become putrid, and produce fevers of the very worſt kind.

Many peaſants are extremely careleſs with reſpect to what they eat or drink, and often through mere indolence, uſe unwholeſome food, when they might, for the ſame expence, have that which is wholeſome. In ſome parts of Britain the peaſants are too careleſs even to take the trouble of dreſſing their own victuals. Such people would live upon one meal a day in indolence, rather than labour, though it were to procure them the greateſt affluence.

Fevers of a very bad kind are often occaſioned among labourers by poor living. When the body is not ſufficiently nouriſhed, the humours become vitiated, and the ſolids weak; from whence the moſt fatal conſequences enſue. Poor living is likewiſe productive of many of thoſe cutaneous diſeaſes ſo frequent among the lower claſs of people. It is remarkable that cattle, when pinched in their food, are generally affected with diſeaſes of the ſkin, which ſeldom fail to diſappear when they are put upon a good paſture. This ſhews how

much a good ſtate of the humours depends upon a ſufficient quantity of proper nouriſhment.

Poverty not only occaſions, but aggravates, many of the diſeaſes of the laborious. Few of them have much foreſight; and if they had, it is ſeldom in their power to ſave any thing. They are glad to make a ſhift to live from day to day; and when any diſeaſe overtakes them, they are miſerable indeed. Here the godlike virtue of charity ought always to exert itſelf. To relieve the induſtrious poor in diſtreſs, is ſurely the moſt exalted act of religion and humanity. They alone, who are witneſſes of theſe ſcenes of calamity, can form a notion of what numbers periſh in diſeaſes, for want of proper aſſiſtance, and even for want of the neceſſaries of life.

Labourers are often hurt by a fooliſh emulation, which promps them to vie with one another, till they overheat themſelves to ſuch a degree as to occaſion a fever, or even to drop down dead. Such as wantonly throw away their lives in this manner, deſerve to be looked upon in no better light than ſelf-murderers.

The office of a ſoldier, in time of war, may be ranked among the laborious employments. Soldiers ſuffer many hardſhips from the inclemency of ſeaſons, long marches, bad proviſions, hunger, watching, unwholeſome climates, bad water, &c. Theſe occaſion fevers, fluxes, rheumatiſms, and other fatal diſeaſes, which generally do greater execution than the ſword, eſpecially when campaigns are continued too late in the ſeaſon. A few weeks of cold rainy weather will often prove more fatal than an engagement.

Thoſe who have the command of armies ſhould take care that their ſoldiers be well clothed and well fed. They ought alſo to finiſh their campaigns in due ſeaſon, and to provide their men with dry and well aired winter quarters. Theſe rules, taking care at the ſame time to keep the ſick people at a proper diſtance from thoſe in health, would tend greatly to preſerve the lives of the ſoldiery §.

§ Indeed it is to be regretted, that ſoldiers ſuffer not leſs from indolence and intemperance in time of peace, than from hardſhips in time

Sailors may alſo be numbered among the laborious. They undergo great hardſhips from change of climate, the violence of the weather, hard labour, bad proviſions, &c. Sailors are of ſo great importance both to the trade and ſafety of this kingdom, that too much pains can never be beſtowed in pointing out the means of preſerving their lives.

One great ſource of the diſeaſes of ſea-faring people is exceſs. When they get on ſhore, after having been long at ſea, without regard to the climate, or their own conſtitutions, they plunge headlong into all manner of riot, and often perſiſt till a fever puts an end to their life. Thus intemperance, and not the climate, is often the cauſe why many of our brave ſailors die on foreign coaſts. Such people ought not to live too low; but they will find moderation the beſt defence againſt fevers and many other maladies.

Sailors, when on duty, cannot avoid ſometimes getting wet. When this happens, they ſhould change their clothes as ſoon as they are relieved, and take every method to reſtore the perſpiration. They ſhould not in this caſe make too free with ſpirits or other ſtrong liquors, but ſhould rather drink them diluted with warm water, and immediately go to bed; where a ſound ſleep and a gentle ſweat would ſet all to rights.

war. If men are idle they will be vicious. It would therefore be of eat importance, could a ſcheme be formed for rendering the military times of peace, both more healthy and more useful. These deſira- objects might, in our opinion, be obtained, by employing them for me hours every day, and advancing their pay accordingly. By this ans, idleneſs, the mother of vice, might be prevented, the price labour lowered, public works, as harbours, canals, turnpike roads, c. might be made without hurting manufactures; and ſoldiers might enabled to marry and bring up children. A ſcheme of this kind ght eaſily be conducted, ſo as not to depreſs the martial ſpirit, ovided the men were only to work four or five hours every day, l always to work without doors: no ſoldiers ſhould be ſuffered to k too long, or to follow any ſedentary employment. Sedentary ployments render men weak and effeminate, quite unfit for the dſhips of war: whereas working for a few hours every day with- doors, would inure them to the weather, brace their nerves, and rease their ſtrength and courage.

But the health of ſailors ſuffer moſt from unwholeſome food. The conſtant uſe of ſalted proviſions vitiates the humours, and occaſions a ſcurvy, and other obſtinate maladies. It is no eaſy matter to prevent this diſeaſe in long voyages; yet we cannot help thinking, that much might be done towards effecting ſo deſirable an end, were due pains beſtowed for that purpoſe. For example, various roots, greens, and fruits, might be kept a long time at ſea, as onions, potatoes, cabbages, lemons, oranges, tamarinds, apples, &c. When fruits cannot be kept, the juices of them either freſh or fomented, may. With theſe all the drink, and even the food, of the ſhip's company ought to be acidulated in long voyages.

Stale bread and beer likewiſe contribute to vitiate the humours. Flour will keep for a long time on board, of which freſh bread might frequently be made. Malt too might be kept, and infuſed with boiling water at any time. This liquor, when drank even in form of wort, is very wholeſome, and is found to be an antidote againſt the ſcurvy. Small wines and cider might likewiſe be plentifully laid in; and ſhould they turn ſour, they would ſtill be uſed as vinegar. Vinegar is a great antidote againſt diſeaſes, and ſhould be uſed by all travellers, eſpecially at ſea. It may either be mixed with the water they drink, or taken in their food.

Such animals as can be kept alive, ought likewiſe to be carried on board, as hens, ducks, pigs, &c. Freſh broths made of portable ſoup, and puddings made of peas or other vegetables, ought to be uſed plentifully. Many other things will readily occur to people converſant in theſe matters, which would tend to preſerve the health of that brave and uſeful ſet of men *.

* Our countryman, the celebrated Captain Cook, has ſhewn how far, by proper care and attention, the diſeases formerly ſo fatal to ſeamen may be prevented. In a voyage of three years and eighteen days, during which he was expoſed to every climate, from the 52° north to the 71° of ſouth latitude, of one hundred and eighteen men, compoſing the ſhip's company, he loſt only one, who died of a *phthiſis pulmonalis*. The principal means he uſed were to preſerve a

We have reaſon to believe, if due attention were paid to the diet, air, cloathing, and above all things to the cleanlineſs of ſea-faring people, they would be the moſt healthy ſet of men in the world; but when theſe are neglected, the very reverſe will happen.

The beſt *medical antidote* that we can recommend to ſailors or ſoldiers on foreign coaſts, eſpecially where dampneſs prevails, is the Peruvian bark. This will often prevent fevers, and other fatal diſeaſes. About a drachm of it may be chewed every day; or if this ſhould prove diſagreeable, an ounce of bark with half an ounce of orange peel, and two drachms of ſnake-root coarſely powdered, may be infuſed for two or three days in an Engliſh quart of brandy, and half a wine-glaſs of it taken twice or thrice a day when the ſtomach is empty. This has been found to be an excellent antidote againſt fluxes, putrid, intermitting and other fevers, in unhealthy climates. It is not material in what form this medicine is taken. It may either be infuſed in water, wine, or ſpirits, as recommended above, or made into an electuary with ſyrup of lemons, oranges, or the like.

THE SEDENTARY.

Though nothing can be more contrary to the nature of man than ſedentary life, yet this claſs comprehends by far the greater part of the ſpecies. Almoſt the whole female world, and, in manufacturing countries, the major part of the males, may be reckoned sedentary §.

Agriculture, the firſt and moſt healthful of all employments, is now followed by few who are able to

ſtrict attention to cleanlineſs, to procure abundance of vegetables and freſh provisions, eſpecially good water, and to allow his people ſufficient time for reſt.

§ The appellation of sedentary has generally been given only to the studious; we can see no reason, however, for restricting it to them alone. Many artificers may, with as much propriety, be denominated sedentary as the studious, with this particular disadvantage, that they are often obliged to sit in very aukward postures, which the studious need not do, unless they please.

carry on any other buſineſs. But thoſe who imagine that the culture of the earth is not ſufficient to employ all its inhabitants, are greatly miſtaken. An ancient Roman, we are told, could maintain his family from the produce of one acre of ground. So might a modern Briton, if he would be contented to live like a Roman. This ſhews what an immenſe increaſe of inhabitants Britain might admit of, and all of them live by the culture of the ground.

Agriculture is the great ſource of domeſtic riches: Where it is neglected, whatever wealth may be imported from abroad, poverty and miſery will abound at home. Such is, and ever will be, the fluctuating ſtate of trade and manufactures, that thouſands of people may be in full employment to-day and in beggary to-morrow. This can never happen to thoſe who cultivate the ground. They can eat the fruit of their labour, and can always by induſtry, obtain at leaſt the neceſſaries of life.

Though ſedentary employments are neceſſary, yet there ſeems to be no reaſon why any perſon ſhould be confined for life to thoſe alone. Where ſuch employments intermixed with the more active and laborious, they would never do hurt. It is conſtant confinement that ruins the health. A man will not be hurt by ſitting five or ſix hours a-day; but if he is obliged to ſit ten or twelve, he will ſoon be diſeaſed.

But it is not the want of exerciſe alone which hurts ſedentary people; they likewiſe ſuffer from the confined air which they breathe. It is very common to ſee ten or a dozen tailors†, or ſtay-makers, for example, crowded into one ſmall apartment, where there is hardly room for one perſon to breathe freely. In this ſituation they

† A perſon of obſervation in that line of life told me, that moſt tailors die of conſumptions; which he attributed chiefly to the unfavourable poſtures in which they ſit, and the unwholeſomeneſs of thoſe places where their buſineſs is carried on. If more attention was not paid to profit than to the preſervation of human lives, this evil might be eaſily remedied; but while maſters only mind their own inſerest, nothing will be done for the ſafety of their ſervants.

generally continue for many hours at a time, often with the addition of ſundry candles, which tend likewiſe to waſte the air, and render it leſs fit for reſpiration. Air that is breathed repeatedly becomes unfit for expanding the lungs. This is one cauſe of the phthiſical coughs, and other complaints of the breaſt, ſo incident to ſedentary artificers.

Even the perſpiration from a great number of perſons pent up together, renders the air unwholeſome. The danger from this quarter will be greatly increaſed, if any one of them happens to have bad lungs, or to be otherwiſe diſeaſed. Thoſe who ſit near him being forced to breathe the ſame air, can hardly fail to be infected. It would be a rare thing, however, to find a dozen of ſedentary people all in good health. The danger of crowding them together muſt therefore be evident to every one.

Many of thoſe who follow ſedentary employments are conſtantly in a bending poſture, as ſhoemakers, tailors, cutlers, &c. Such a ſituation is extremely hurtful. A bending poſture obſtructs all the vital motions, and of courſe muſt deſtroy the health. Accordingly we find ſuch artificers generally complaining of indigeſtions, ſtatulencies, head achs, pains of the breaſt, &c.

The aliment of ſedentary people inſtead of being puſhed forwards by an erect poſture, and the action of the muſcles, is in a manner confined in the bowels. Hence indigeſtion, coſtiveneſs, wind, and other hypochondrical affections, the conſtant companion of the ſedentary. Indeed none of the excretions can be duly performed where exerciſe is wanting; and when the matter which ought to be diſcharged in this way is retained too long in the body, it muſt have bad effects, as it is again taken up into the maſs of humours.

A bending poſture is likewiſe hurtful to the lungs. When this organ is compreſſed, the air cannot have free acceſs into all its parts, ſo as to expand them properly. Hence tubercles, adheſions, &c. are formed, which often end in conſumptions. Beſides, the proper action of the lungs being abſolutely neceſſary for making good

blood, when that organ fails, the humours ſoon become univerſally depraved, and the whole conſtitution goes to wreck.

The ſedentary artificers are not only hurt by preſſure on the bowels, but alſo on the inferior extremities, which obſtructs the circulation in theſe parts, and renders them weak and feeble. Thus tailors, ſhoemakers, &c. frequently loſe the uſe of their legs, altogether; beſides, the blood and humours are, by ſtagnation, vitiated, and the perſpiration is obſtructed; whence proceed the ſcab, ulcerous ſores, foul blotches, and other cutaneous diſeaſes, ſo common among ſedentary artificers.

A bad figure of body is a very common conſequence of cloſe application to ſedentary employments. The ſpine, for example, by being continually bent, puts on a crooked ſhape, and generally remains ſo ever after. But a bad figure of body has already been obſerved to be hurtful to health, as the vital functions are thereby impeded.

A ſedentary life ſeldom fails to occaſion an univerſal relaxation of the ſolids. This is the great ſource from whence moſt of the diſeaſes of ſedentary people flow. The ſcrophula, conſumption, hyſterics, and nervous diſeaſes, now ſo common, were very little known in this country before ſedentary people became ſo numerous; and they are ſtill very little known among ſuch of our people as follow active employments without doors, though in great towns at leaſt two thirds of the inhabitants are afflicted with them.

It is very difficult to remedy theſe evils; becauſe many who have been accuſtomed to a ſedentary life, like rickety children, loſe all inclination for exerciſe: we ſhall, however, throw out a few hints with reſpect to the moſt likely means for preſerving the health of this uſeful ſet of people, which ſome of them, we hope, will be wiſe enough to take.

It has been already obſerved, that ſedentary artificers are often hurt by their bending poſture. They ought therefore to ſtand or ſit as erect as the nature of their employments will permit. They ſhould likewiſe change

their poſture frequently, and ſhould never ſit too long at a time, but leave off work, and walk, ride, run, or do any thing that will promote the vital functions.

Sedentary artificers are generally allowed too little time for exerciſe; yet ſhort as it is, they ſeldom employ it properly. A journeyman tailor or weaver, for example, inſtead of walking abroad for exerciſe and freſh air, at his hours of leiſure, chuſes often to ſpend them in a public houſe, or in playing at ſome ſedentary game, by which he generally loſes both his time and his money.

The aukward poſtures in which many ſedentary artificers work, ſeem rather to be the effect of cuſtom than neceſſity. For example, a table might ſurely be contrived for ten or a dozen tailors to ſit round, with liberty for their legs either to hang down, or reſt upon a footboard, as they ſhould chuſe A place might likewiſe be cut out for each perſon, in ſuch a manner that he might ſit as conveniently for working as in the preſent mode of ſitting croſs legged.

All ſedentary artificers ought to pay the moſt religious regard to cleanlineſs. Both their ſituation and occupations render this highly neceſſary. Nothing would contribute more to preſerve their health, than a ſtrict attention to it; and ſuch of them as neglect it, not only run the hazard of loſing health, but of becoming a nuiſance to their neighbours.

Sedentary people ought to avoid food that is windy or hard of digeſtion, and ſhould pay the ſtricteſt regard to ſobriety. A perſon who works hard without doors, will ſoon throw off a debauch; but one who ſits has by no means an equal chance. Hence it often happens, that ſedentary people are ſeized with fevers after hard drinking. When ſuch perſons feel their ſpirits low, inſtead of running to the tavern for relief, they ſhould ride or walk in the fields. This would remove the complaint more effectually than ſtrong liquor, and would never hurt the conſtitution.

Inſtead of multiplying rules for preſerving the health of the ſedentary, we ſhall recommend to them the following general plan, viz. That every perſon who follows a

ſedentary employment ſhould cultivate a piece of ground with his own hands. This he might dig, plant, ſow, and weed at leiſure hours, ſo as to make it both an exerciſe and amuſement, while it produced many of the neceſſaries of life. After working an hour in a garden, a man will return with more keenneſs to his employment within doors, than if he had been all the while idle.

Labouring the ground is every way conducive to health. It not only gives exerciſe to every part of the body, but the very ſmell of the earth, and freſh herbs, revives and cheers the ſpirits, whilſt the perpetual proſpect of ſomething coming to maturity, delights and entertains the mind. We are ſo formed as to be always pleaſed with ſomewhat in proſpect, however diſtant or however trivial; hence the happineſs that moſt men feel in planting, ſowing, building, &c. Theſe ſeem to have been the chief employments of the more early ages, and when kings and conquerors cultivated the ground, there is reaſon to believe that they knew as well wherein true happineſs conſiſted as we do.

It may ſeem romantic to recommend gardening to manufacturers in great towns; but obſervation proves that the plan is very practicable. In the town of Sheffield, in Yorkſhire, where the great iron manufacture is carried on, there is hardly a journeyman cutler, who does not poſſeſs a piece of ground, which he cultivates as a garden. This practice has many ſalutary effects. It not only induces theſe people to take exerciſe without doors, but alſo to eat many greens, roots, &c. of their own growth, which they would never think of purchaſing. There can be no reaſon why manufacturers in any other town in Great Britain ſhould not follow the ſame plan. It is indeed to be regretted, that in ſuch a place as London a plan of this kind is not practicable; yet even there, ſedentary artificers may find opportunities of taking air and exerciſe, if they chuſe to embrace them.

Mechanics are too much inclined to crowd into great towns. The ſituation may have ſome advantages; but it has likewiſe many diſadvantages. All mechanics who live in the country have it in their power to cultivate a

piece of ground: which indeed moſt of them do. This not only gives them exerciſe, but enables them to live more comfortably. So far at leaſt as my obſervation extends, mechanics who live in the country are far more happy than thoſe in great towns. They enjoy better health, live in greater affluence, and ſeldom fail to rear a healthy and numerous offspring.

In a word, exerciſe without doors, in one ſhape or another, is abſolutely neceſſary to health. Thoſe who neglect it, though they may for a while drag out life, can hardly be ſaid to enjoy it. Weak and effeminate, they languiſh for a few years, and ſoon drop into an untimely grave.

THE STUDIOUS.

Intenſe thinking is ſo deſtructive to health, that few inſtances can be produced of ſtudious perſons who are ſtrong and healthy. Hard ſtudy always implies a ſedentary life; and when intenſe thinking is joined to the want of exerciſe, the conſequence muſt be bad. We have frequently known even a few months of cloſe application to ſtudy ruin an excellent conſtitution, by inducing a train of nervous complaints which could never be removed. Man is evidently not formed for continual thought more than for perpetual action, and would be as ſoon worn out by one as by the other.

So great is the power of the mind over the body, that, by its influence, the whole vital motions may be accelerated or retarded to almoſt any degree. Thus cheerfulneſs and mirth quicken the circulation, and promote all the ſecretions; whereas ſadneſs and profound thought never fail to retard them. Hence it would appear, that even a degree of thoughtleſſneſs is neceſſary to health. Indeed the perpetual thinker ſeldom enjoys either health or ſpirits; while the perſon who can hardly be ſaid to think at all, generally enjoys both.

Perpetual thinkers, as they are called, ſeldom think long. In a few years they generally become quite ſtupid

and exhibit a melancholy proof how readily the greateſt bleſſings may be abuſed. Thinking, like every thing elſe, when carried to extreme, becomes a vice; nor, can any thing afford a greater proof of wisdom, than for a man frequently and ſeaſonably to unbend his mind. This may generally be done by mixing in cheerful company, active diverſions, or the like.

Inſtead of attempting to inveſtigate the nature of that connection which ſubſiſts between the mind and body, or to inquire into the manner in which they mutually affect each other, we ſhall only mention thoſe diſeaſes to which the learned are more peculiarly liable, and endeavour to point out the means of avoiding them.

Studious perſons are very ſubject to the gout. This painful diſeaſe in a great meaſure proceeds from indigeſtion, and an obſtructed perſpiration. It is impoſſible that the man who ſits from morning till night ſhould either digeſt his food, or have any of the ſecretions in due quantity. But when that matter which ſhould be thrown off by the ſkin, is retained in the body, and the humours are not duly prepared, diſeaſes muſt enſue.

The ſtudious are likewiſe very liable to the ſtone and gravel. Exerciſe greatly promotes both the ſecretion and diſcharge of urine; conſeqnently a ſedentary life muſt have the contrary effect. And any one muſt be ſatisfied of this by obſerving, that he paſſes much more urine by day than in the night, and alſo when he walks or rides, than when he ſits.

The circulation in the liver being ſlow, obſtructions in that organ can hardly fail to be the conſequence of inactivity. Hence ſedentary people are frequently affected with ſcirrhous livers. But the proper ſecretion and diſcharge of the bile is ſo neceſſary a part of the animal œconomy, that where theſe are not duly performed, the health muſt ſoon be impaired. Jaundice, indigeſtion, loſs of appetite, and a waſting of the whole body, ſeldom fail to be the conſequences of a vitiated ſtate of the liver or obſtructions of the bile.

Few diſeaſes prove more fatal to the ſtudious than conſumptions of the lungs. It has already been obſerved that this organ cannot be duly expanded in thoſe who

do not take proper exercise; and where that is the case, obstructions and adhesions will ensue. Not only want of exercise, but the posture in which studious persons generally sit, is very hurtful to the lungs. Those who read or write much are ready to contract a habit of bending fowards, and often press with their breast upon a table or bench. This posture cannot fail to hurt the lungs.

The functions of the heart may likewise by this means be injured. I remember to have seen a man opened, whose pericardium adhered to the breast bone, in such a manner as to obstruct the motion of the heart, and occasion his death. The only probable cause that could be assigned for this singular symptom was, that the man whose business was writing, used constantly to sit in a bending posture, with his breast pressing upon the edge of a flat table.

No person can enjoy health who does not properly digest his food. But intense thinking and inactivity never fail to weaken the powers of digestion. Hence the humours become crude and vitiated, the solids weak and relaxed, and the whole constitution goes to ruin.

Long and intense thinking often occasions grevious head achs, which bring on vertigoes, apoplexies, palsies, and other fatal disorders. The best way to prevent these is never to study too long at one time, and to keep the body regular, either by proper food, or taking frequently a little of some opening medicine.

Those who read or write much are often afflicted with sore eyes. Studying by candle light is peculiarly hurtful to the sight. This ought to be practised as seldom as possible. When it is unavoidable, the eyes should be shaded, and the head should not be held too low. When the eyes are weak or painful, they should be bathed every night and morning in cold water, to which a little brandy may be added.

It has already been observed, that the excretions are very defective in the studious. The dropsy is often occasioned by the retention of those humours which ought to be carried off in this way. Any person may observe, that sitting makes his legs swell, and that this goes off

by exercise; and clearly points out the method of prevention.

Fevers, especially of the nervous kind, are often the effect of study. Nothing affects the nerves so much as intense thought. It in a manner unhinges the whole disorders the mind itself. Hence a delirium, melancholy and even madness, are often the effects of close application to study. In fine there is no disease which can proceed either from a bad state of the humours, a defect of the usual secretions, or a debility of the nervous system, which may not be induced by intense thinking.

But the most affecting of these diseases which attack the studious is the hypochondriac. This disease seldom fails to be the companion of deep thought. It may rather be called the complication of maladies than a single one. To what a wretched condition are the best of men often reduced by it! Their strength and appetite fail; a perpetual gloom hangs over their minds; they live in the constant dread of death, and are continually in search of relief from medicine, where, alas! it is not to be found. Those who labour under this disorder, though they are often made the subject of ridicule, justly claim our highest sympathy and compassion.

Hardly any thing can be more preposterous than for a person to make study his sole business. A mere student is seldom an useful member of society. He often neglects the most important duties of life, in order to pursue studies of a very trifling nature. Indeed it rarely happens, that any useful invention is the effect of mere study. The farther men dive into profound researches, they generally deviate the more from common sense, and too often lose sight of it altogether. Profound speculations, instead of making men wiser or better, generally render them absolute sceptics, and overwhelm them with doubt and uncertainty. All that is necessary for man to know, in order to be happy, is easily obtained; and the rest, like the forbidden fruit, serves only to increase his misery.

Studious persons, in order to relieve their minds, must not only discontinue to read and write, but engage in

ſome employment or diverſion that will ſo far occupy the thought as to make them forget the buſineſs of the cloſet. A ſolitary ride or walk are ſo far from relaxing the mind, that they rather encourage thought. Nothing can divert the mind when it gets into a train of ſerious thinking, but attention to ſubjects of a more trivial nature. Theſe prove a kind of play to the mind, and conſequently relieve it.

Learned men often contract a contempt for what they call trifling company. They are aſhamed to be ſeen with any but philoſophers. This however is no proof of their being philoſophers themſelves. No man deſerves that name who is aſhamed to unbend his mind by aſſociating with the cheerful and gay. Even the ſociety of children will relieve the mind, and expel the gloom which application to ſtudy is too apt to occaſion.

As ſtudious people are neceſſarily much within doors, they ſhould make choice of a large and well aired place for ſtudy. This would not only prevent the bad effects which attend confined air, but would cheer the ſpirits, and have a moſt happy influence both on the body and mind. It is ſaid of Euripides the tragedian, that he uſed to retire to a dark cave to compoſe his tragedies; and of Demoſthenes the Grecian orator, that he choſe a place for ſtudy where nothing could be either heard or ſeen. With all deference to ſuch venerable names, we cannot help condemning their taſte. A man may ſurely think to as good purpoſe in an elegant apartment as in a cave; and may have as many conceptions where the all cheering rays of the ſun render the air wholeſome, as in places where they never enter.

Thoſe who read and write much ſhould be very attentive to their poſture. They ought to ſit and ſtand by turns, always keeping as nearly in an erect poſture as poſſible. Thoſe who dictate, may do it walking. It has an excellent effect frequently to read or ſpeak aloud. This not only exerciſes the lungs, but almoſt the whole body. Hence ſtudious people are generally benefited by delivering diſcourſes in public. Public ſpeakers, indeed, ſometimes hurt themſelves, by overacting their part; but this is their own fault. The martyr to mere vociferation merits not our ſympathy.

The morning has, by all medical writers, been reckoned the beſt time for ſtudy. It is ſo. But it is alſo the moſt proper ſeaſon for exerciſe, while the ſtomach is empty, and the ſpirits refreſhed with ſleep. Studious people ſhould therefore ſometimes ſpend the morning in walking, riding, or ſome manly diverſions without doors. This would make them return to ſtudy with greater alacrity, and would be of more ſervice than twice the time, after their ſpirits are worn out with fatigue. It is not ſufficient to take diverſions only when we can think no longer. Every ſtudious perſon ſhould make it a part of his buſineſs, and ſhould let nothing interrupt his hours of recreation more than thoſe of ſtudy.

Muſic has a very happy effect in relieving the mind when fatigued with ſtudy. It would be well if every ſtudious perſon were ſo far acquainted with that ſcience as to amuſe himſelf after ſevere thought by playing ſuch airs have a tendency to raiſe the ſpirits, and inſpire cheerfulneſs and good humour.

It is a reproach to learning, that any of her votaries, to relieve the mind after ſtudy, ſhould betake themſelves to the uſe of ſtrong liquors. This indeed is a remedy; but it is a deſperate one, and always proves deſtructive. Would ſuch perſons, when their ſpirits are low, get on horſeback, and ride ten or a dozen miles, they would find it a more effectual remedy than any cordial medicine in the apothecary's ſhop, or all the ſtrong liquors in the word.

The following is my plan, and I cannot recommend a better to others. When my mind is fatigued with ſtudy, or other ſerious buſineſs, I mount my horſe, and ride ten or twelve miles into the country, where I ſpend a day, and ſometimes two, with a cheerful friend; after which I never fail to return to town with new vigour, and to purſue my ſtudies or buſineſs with freſh alacrity.

It is much to be regretted, that learned men, while in health, pay ſo little regard to theſe things; there is not any thing more common than to ſee a miſerable object over-run with nervous diſeaſes, bathing, walking, riding, and, in one word, doing every thing for health after it is gone; yet if any one had recommended theſe

things to him by way of prevention, the advice would in all probability have been treated with contempt, or at leaſt with neglect. Such is the weakneſs and folly of mankind, and ſuch the want of foreſight, even in thoſe who ought to be wiſer than others!

With regard to the diet of the ſtudious, we ſee no reaſon why they ſhould abſtain from any kind of food that is wholeſome, provided they uſe it in moderation. They ought, however, to be ſparing in the uſe of every thing that is ſour, windy, rancid, or hard of digeſtion. Their ſuppers ſhould always be light, or taken ſoon in the evening. Their drink may be water, fine malt liquor, not too ſtrong, good cider, wine and water, or, if troubled with acidities, water mixed with a little brandy, rum, or any other genuine ſpirit.

We ſhall only obſerve, with regard to thoſe kinds of exerciſe which are moſt proper for the ſtudious, that they ſhould not be too violent, nor ever carried to the degree of exceſſive fatigue. They ought likewiſe to be frequently varied, ſo as to give action to all the different parts of the body; and ſhould as often as poſſible be taken in the open air. In general, riding on horſeback, walking, working in a garden, or playing at ſome active diverſions, are the beſt.

We would likewiſe recommend the uſe of the cold bath to the ſtudious. It will, in ſome meaſure, ſupply the place of exerciſe, and ſhould not be neglected by perſons of a relaxed habit, eſpecially in the warm ſeaſon.

No perſon ought either to take violent exerciſe, or to ſtudy immediately after a full meal.

CHAP. III.

OF ALIMENT.

UNWHOLESOME food, and irregularities of diet, occaſion many diſeaſes. There is no doubt but the whole conſtitution of body may be changed by diet

alone. The fluids may be thereby attenuated or condenſed, rendered mild or acrimonious, coagulated or diluted, to almoſt any degree. Nor are its effects upon the ſolids leſs conſiderable. They may be braced or relaxed, have their ſenſibility, motions, &c. greatly increaſed or diminſhed, by different kinds of aliment. A very ſmall attention to theſe things will be ſufficient to ſhew, how much the preſervation of health depends upon a proper regimen of the diet.

Nor is an attention to diet, neceſſary for the preſervation of health only; it is likewiſe of importance in the cure of diſeaſes. Every intention in the cure of many diſeaſes, may be anſwered by diet alone. Its effects, indeed, are not always ſo quick as thoſe of medicine, but they are generally more laſting; beſides, it is neither ſo diſagreeable to the patient, nor ſo dangerous as medicine, and is always more eaſily obtained.

Our intention here is not to inquire minutely into the nature and properties of the various kinds of aliment in uſe among mankind; nor to ſhew their effects upon the different conſtitutions of the human body; but to mark ſome of the moſt pernicious errors which people are apt to fall into, with reſpect both to the quantity and quality of their food, and to point out their influence upon health.

It is not indeed an eaſy matter to aſcertain the exact quantity of food proper for every age, ſex, and conſtitution; but a ſcrupulous nicety here is by no means neceſſary. The beſt rule is to avoid all extremes. Mankind were never intended to weigh and meaſure their food. Nature teaches every creature when it has enough; and the calls of thirſt and hunger are ſufficient to inform them when more is neceſſary.

Though moderation is the chief rule with regard to the quantity, yet the quality of food merits a farther conſideration. There are many ways by which proviſions may be rendered unwholeſome. Bad ſeaſons may either prevent the ripening of grain, or damage it afterwards. Theſe, indeed, are acts of Providence, and we muſt ſubmit to them; but ſurely no puniſhment can be too ſevere for thoſe who ſuffer proviſions to ſpoil by hoarding them, on purpoſe to raiſe the price, or who

promote their own interets by adulterating the neceſſaries of life ||.

Animal as well as vegetable food, may be rendered unwholeſome, by being kept too long. All animal ſubſtances have a conſtant tendency to putrefaction; and, when that has proceeded too far, they not only become offenſive to the ſenſes, but hurtful to health. Diſeaſed animals, and ſuch as die of themſelves, ought never to be eaten. It is a common practice, however, in ſome grazing countries, for ſervants and poor people to eat ſuch animals as die of any diſeaſe, or are killed by accident. Poverty, indeed, may oblige people to do this; but they had better eat a ſmaller quantity of what is ſound and wholeſome: it would both afford a better nouriſhment, and be attended with leſs danger.

The injunctions given to the Jews, not to eat any creature which died of itſelf, ſeem to have a ſtrict regard to health; and ought to be obſerved by Chriſtians as well as Jews. Animals never die of themſelves without ſome previous diſeaſe; but how a diſeaſed animal ſhould be wholeſome food, is inconceivable; even thoſe which die by accident muſt be hurtful, as their blood is mixed with the fleſh, and ſoon turns putrid.

Animals which feed groſsly, as tame ducks, hogs, &c. are neither ſo eaſily digeſted, nor afford ſuch wholeſome nouriſhment as others. No animal can be wholeſome which does not take ſufficient exerciſe. Moſt of our ſtalled cattle are crammed with groſs food, but not allowed exerciſe nor free air; by which means they indeed grow fat, but their juices, not being properly prepared or aſſimilated, remain crude, and occaſion indigeſtions, groſs humours, and oppreſſions of the ſpirits, in thoſe who feed upon them.

Animals are often rendered unwholeſome by being

|| The poor indeed are generally the firſt who ſuffer by unſound proviſion; but the lives of the labouring poor are of great importance to the ſtate; beſides, diſeases occaſioned by unwholeſome food often prove infectious, by which means they reach people in every ſtation. It is therefore the intereſt of all to take care that no ſpoiled proviſions of any kind be expoſed to ſale.

over-heated. Exceſſive heat cauſes a fever, exalts the animal ſalts, and mixes the blood ſo intimately with the fleſh, that it cannot be ſeparated. For this reaſon, butchers ſhould be ſeverely puniſhed who over-drive their cattle. No perſon would chooſe to eat the fleſh of an animal which had died in an high fever; yet that is the caſe with all over-drove cattle; and the fever is often raiſed even to the degree of madneſs.

But this is not the only way by which butchers render meat unwholeſome. The abominable cuſtom of filling the cellular membrane of animals with air, in order to make them appear fat, is every day practiſed. This not only ſpoils the meat, and renders it unfit for keeping, but is ſuch a dirty trick, that the very idea of it is ſufficient to diſguſt a perſon of any delicacy at every thing which comes from the ſhambles. Who can bear the thought of eating meat which has blown up with air from the lungs of a dirty fellow, perhaps labouring under the very worſt of diſeaſes?

Butchers have likewiſe a method of filling the cellular membranes of animals with blood. This makes the meat ſeem fatter, and likewiſe weigh more, but is notwithſtanding a very pernicious cuſtom, as it both renders the meat unwholeſome and unfit for keeping. I ſeldom ſee a piece of meat from the ſhambles, where the blood was not diffuſed through the cellular texture. I ſhall not ſay that this is always the effect of deſign; but I am certain it is not the caſe with animals that are killed for domeſtic uſe, and properly blooded. Veal ſeems to be moſt frequently ſpoilt in this way. Perhaps that may in ſome meaſure be owing to the practice of carrying calves from a great diſtance to market, by which means their tender fleſh is bruiſed, and many of their veſſels burſt.

No people in the world eat ſuch quantities of ſalt meat as the Engliſh, which is one reaſon why they are ſo generally tainted with the ſcurvy, and its numerous train of conſequences, indigeſtion, low ſpirits, hypochondriaciſm, &c. Animal food was ſurely deſigned for man, and with a proper mixture of vegetables, it will be

found the moſt wholeſome; but to gorge beef, mutton, pork, fiſh, and fowl, twice or thrice a-day, is certainly too much. All who value health ought to be contented with making one meal of fleſh in the twenty-four hours, and this ought to conſiſt of one kind only.

The moſt obſtinate ſcurvy, has often been cured by a vegetable diet; nay milk alone will frequently do more in that diſeaſe than any medicine. Hence it is evident, that if vegetables and milk were more uſed in diet, we ſhould have leſs ſcurvy, and likewiſe fewer putrid and inflammatory fevers. Freſh vegetables, indeed, come to be daily more uſed in diet; this laudable practice we hope will continue to gain ground.

Our aliment ought neither to be too moiſt nor too dry. Moiſt aliment relaxes the ſolids, and renders the body feeble. Thus we ſee females, who live much on tea and other watery diet, generally become weak and unable to digeſt ſolid food: hence proceed hyſterics, and all their dreadful conſequences. On the other hand food that is too dry renders the ſolids in a manner rigid, and the humours viſcid, which diſpoſes the body to inflammatory fevers, ſcurvies, and the like.

Much has been ſaid on the ill effects of tea in diet. They are, no doubt, numerous, but they proceed rather from the imprudent uſe of it, than from any bad qualities in the tea itſelf. Tea is now the univerſal breakfaſt in this part of the world; but the morning is ſurely the moſt improper time of the day for drinking it. Moſt delicate perſons, who, by the bye, are the greateſt tea-drinkers, cannot eat any thing in the morning. If ſuch perſons, after faſting ten or twelve hours, drink four or five cups of tea without eating almoſt any bread, it muſt hurt them. Good tea taken in a moderate quantity, not too ſtrong, nor too hot, nor drank upon an empty ſtomach, will ſeldom do harm; but if it be bad, which is often the caſe, or ſubſtituted in the room of ſolid food, it muſt have many ill effects.

The arts of cookery render many things unwholeſome, which are not ſo in their own nature. By jumbling to-

gether a number of different ingredients, in order to make a poignant ſauce, or rich ſoup, the compoſition proves almoſt a poiſon. All high ſeaſoning, pickles, &c. are only incentives to luxury, and never fail to hurt the ſtomach. It were well for mankind, if cookery, as an art, were entirely prohibited. Plain roaſting or boiling is all that the ſtomach requires. Theſe alone are ſufficient for people in health, and the ſick have ſtill leſs need of a cook.

The liquid part of our aliment likewiſe claims our attention. Water is not only the baſis of moſt liquors, but alſo compoſes a great part of our ſolid food Good water muſt therefore be of the greateſt importance in diet. The beſt water is that which is moſt pure, and free from any mixture of foreign bodies. Water takes up parts of moſt bodies with which it comes into contact; by this means it is often impregnated with metals or minerals of a hurtful or poiſonous nature. Hence the inhabitants of ſome hilly countries have peculiar diſeaſes, which in all probability proceed from the water. Thus the people who live near the Alps in Switzerland, and the inhabitants of the Peak in Derby in England, have large tumours or wens on their necks. This diſeaſe is generally imputed to the ſnow water; but there is more reaſon to believe it is owing to the minerals in the mountains through which the water paſſes.

When water is impregnated with foreign bodies, it generally appears by its weight, colour, taſte, ſmell, heat, or ſome other ſenſible quality. Our buſineſs therefore is to chuſe ſuch water, for common uſe, as is lighteſt, and without any particular colour, taſte, or ſmell, &c. In moſt places of Britain the inhabitants have it in their power to make choice of their water; and few things would contribute more to health, than a due attention to this article. But mere indolence often induces people to make uſe of the water that is neareſt to them, without conſidering its qualities.

Before water be brought into great towns, the ſtricteſt attention ought to be paid to its qualities, as many diſeaſes may be occaſioned or aggravated by bad water:

nd when once it has been procured at a great expence eople are unwilling to give it up.

The common methods of rendering water clear by ltration, or ſoft by expoſing it to the ſun and air, &c. re ſo generally known, that it is unneceſſary to ſpend me in explaining them. We ſhall only in general dvſe all to avoid waters which ſtagnate long in ſmall kes, ponds, or the like, as ſuch waters often become ntrid, by the corruption of animal or vegetable bodies ith which they abound. Even cattle frequently ffer by drinking, in dry ſeaſons, water which has ſtood ng in ſmall reſervoirs, without being ſupplied by rings, or freſhened with ſhowers. All wells ought to e kept clean and have a free communication with the ir.

As fermented liquors, notwithſtanding they have been xclaimed againſt by many writers, ſtill continue to be e common drink of almoſt every perſon who can ford them; we ſhall rather endeavour to aſſiſt people the choice of theſe liqours, than pretend to condemn hat cuſtom has ſo firmly eſtabliſhed. It is not the oderate uſe of ſound fermented liquors which hurts ankind; it is exceſs, and uſing ſuch as are ill prepared r vitiated.

Fermented liquors, which are too ſtrong, hurt digeſ- on; and the body is ſo far from being ſtrengthened by em, that it is weakened and relaxed. Many imagine at hard labour could not be ſupported without drink- g ſtrong liquors; this is a very erroneous notion. Men ho never taſte ſtrong liquors are not only able to en- ure more fatigue, but alſo live much longer, than thoſe ho uſe them daily. But, ſuppoſe ſtrong liquors did nable a man to do more work, they muſt nevertheleſs eſte the powers of life, and occaſion premature old ge. They keep up a conſtant fever, which exhauſts e ſpirits, inflames the blood, and diſpoſes the body to mberleſs diſeaſes.

But fermented liquors may be too weak as well as too rong; when that is the caſe, they muſt either be drank ew, or they become ſour or dead: when ſuch liquors

are drank new, the fermentation not being over, the generate air in the bowels, and occaſion flatulencies and when kept till ſtale, they turn ſour on the ſtomach and hurt digeſtion. For this reaſon all malt liquors cider, &c. ought to be of ſuch ſtrength as to keep til they be ripe and then they ſhould be uſed. When ſuch liquors are kept too long, though they ſhould not become ſour, yet they generally contract a hardneſs which renders them unwholeſome.

All families, who can, ought to prepare their own liquors. Since preparing and vending of liquors became one of the moſt general branches of buſineſs, every method has been tried to adulterate them. The great object both to the makers and venders of liquor is to render it intoxicating. But it is well known that this may be done by other ingredients than thoſe which ought to be uſed for making it ſtrong. It would be imprudent even to name thoſe things which are daily made uſe of to render liquors heady. Suffice it to ſay, that the practice is very common, and that all the ingredients uſed for this purpoſe are of a narcotic or ſtupefactive quality. But as all opiates are poiſonous, it is eaſy to ſee what muſt be the conſequence of this general rule. Though they do not kill ſuddenly, yet they hurt the nerves, relax and weaken the ſtomach, and ſpoil the digeſtion.

Were fermented liquors faithfully prepared, kept to a proper age, and uſed in moderation, they would prove real bleſſings to mankind. But, while they are ill prepared, various ways adulterated, and taken to exceſs they muſt have many pernicious effects.

We would recommend it to families, not only to prepare their own liquors, but likewiſe their bread. Bread is ſo neceſſary a part of diet, that too much care cannot be beſtowed in order to have it ſound and wholeſome. For this purpoſe, it is not only neceſſary that it be made of good grain, but likewiſe properly prepared, and kept free from all unwholeſome ingredients. This, however, we have reaſon to believe is not always the caſe with bread prepared by thoſe who make a trade of vending it. Their object is rather to pleaſe the eye,

han to conſult the health. The beſt bread is that hich is neither too coarſe nor too fine; well ferment- d, and made of wheat flour, or rather of wheat and ye mixed together.

To ſpecify the different kinds of aliment, to ex- lain their nature and properties, and to point out heir effects in different conſtitutions, would far ex- eed the limits of our deſign. Inſtead of a detail of his kind, which would not be generally underſtood, nd of courſe little attended to, we ſhall only mention he following eaſy rules with reſpect to the choice of liment.

Perſons whoſe ſolids are weak and relaxed, ought o avoid all viſcid food, or ſuch things as are hard of igeſtion. Their diet, however, ought to be nouriſh- ng; and they ſhould take ſufficient exerciſe in the pen air.

Such as abound with blood ſhould be ſparing in the ſe of every thing that is highly nouriſhing, as fat meat, ich wines, ſtrong ale, and the like. Their food ould conſiſt chiefly of bread and other vegetable ſub- ances: and their drink ought to be water, whey, or nall beer.

Fat people ſhould not eat freely of oily nouriſhing ct. They ought frequently to uſe radiſh, garlic, ices, or ſuch things as are heating and promote per- iration and urine. Their drink ſhould be water, offee, tea, or the like; and they ought to take much xerciſe and little ſleep.

Thoſe who are too lean muſt follow an oppoſite ourſe.

Such as are troubled with acidities, or whoſe food is ot to ſour on the ſtomach, ſhould live much on animal ood; and thoſe who are afflicted with hot alkaline eruc- tions, ought to uſe a diet conſiſting chiefly of acid egetables.

People who are affected with the gout, low ſpirits, ypochondriac or hyſteric diſorders, ought to avoid all ntulent food, every thing that is viſcid, or hard of di- eſtion, and ſalted and ſmoke dried proviſions, and

whatever is auſtere, acid, or apt to turn ſour on the ſtomach. Their food ſhould be light, ſpare, cool, and of an opening nature.

The diet ought not only to be ſuited to the age and conſtitution, but alſo to the manner of life; a ſedentary or ſtudious perſon ſhould live more ſparingly than one who labours hard without doors. Many kinds of food will nouriſh a peaſant very well which would be almoſt indigeſtible to a citizen; and the latter will live upon a diet on which the former would ſtarve.

Diet ought not to be too uniform. The conſtant uſe of one kind of food might have ſome bad effects. Nature teaches us this, by the great variety of aliment which ſhe has provided for man, and likewiſe by giving him an appetite for different kinds of food.

Thoſe who labour under any particular diſeaſe, ought to avoid ſuch aliments as have a tendency to increaſe it; for example, a gouty perſon ſhould not indulge in rich wines, ſtrong ſoups, or gravies, and ſhould avoid all acids. One who is troubled with the gravel ought to ſhun all auſtere and aſtringent aliments; and thoſe who are ſcorbutic ſhould be ſparing in the uſe of ſalted proviſions, &c.

In the firſt period of life, our food ought to be light but nouriſhing, and frequently taken. Food that is ſolid, with a ſufficient degree of tenacity, is moſt proper for the ſtate of manhood. The diet ſuited to the laſt period of life, when nature is upon the decline, approaches nearly to that of the firſt. It ſhould be lighter and more ſucculent than that of vigorous age, and likewiſe more frequently taken.

It is not only neceſſary for health that our diet be wholeſome, but alſo that it be taken at regular periods. Some imagine long faſting will atone for exceſs; but this, inſtead of mending the matter, generally makes it worſe. When the ſtomach and inteſtines are over diſtended with food, they loſe their proper tone, and, by long faſting, they become weak, and inflated with wind. Thus either gluttony or faſting deſtroys the powers of digeſtion.

The frequent repetition of aliment is not only neceſſary for repairing the continual waſte of our bodies, but likewiſe to keep the fluids ſound and ſweet. Our humours, even in the moſt healthy ſtate, have a conſtant tendency to putrefaction, which can only be prevented by frequent ſupplies of freſh nouriſhment: when that is wanting too long, the putrefaction often proceeds ſo far as to occaſion very dangerous fevers. From hence we may learn the neceſſity of regular meals. No perſon can enjoy a good ſtate of health, whoſe veſſels are either frequently overcharged, or the humours long deprived of freſh ſupplies of chyle.

Long faſting is extremely hurtful to young people: it not only vitiates their humours, but prevents their growth. Nor is it leſs injurious to the aged. Moſt perſons, in the decline of life, are afflicted with wind: this complaint is not only increaſed, but often rendered dangerous, and even fatal, by long faſting. Old people, when their ſtomachs are empty, are frequently ſeized with giddineſs, head-achs, and faintneſs. Theſe complaints may generally be removed by a piece of bread and a glaſs of wine, or taking any other ſolid food; which plainly points out the method of preventing them.

It is more than probable, that many of the ſudden deaths, which happen in the advanced periods of life, are occaſioned by faſting too long, as it exhauſts the ſpirits, and fills the bowels with wind: we would therefore adviſe people in the decline of life, never to allow their ſtomachs to be too long empty. Many people take nothing but a few cups of tea, and a little bread, from nine o'clock at night till two or three next afternoon. Such may be ſaid to faſt almoſt three-fourths of their time; this can hardly fail to ruin their appetite, vitiate the humours, and fill the bowels with wind: all which might be prevented by a ſolid breakfaſt.

It is a very common practice to eat a light breakfaſt and heavy ſupper. This cuſtom ought to be reverſed. When people ſup late their ſupper ſhould be very light; but the breakfaſt ought always to be ſolid If any one

eats a light ſupper, goes ſoon to bed, and riſes betimes in the morning, he will be ſure to find an appetite for his breakfaſt, and may freely indulge it.

The ſtrong and healthy do not indeed ſuffer ſo much from faſting as the weak and delicate; but they run great hazard from its oppoſite, viz. repletion. Many diſeaſes, eſpecially fevers, are the effects of a plethora, or too great fulneſs of the veſſels. Strong people, in high health, have generally a great quantity of blood and other humours. When theſe are ſuddenly increaſed by an overcharge of rich and nouriſhing diet, the veſſels become to much diſtended, and obſtructions and inflammations enſue. Hence ſo many people are ſeized with inflammatory and eruptive fevers, &c. after a feaſt or debauch.

All the great and ſudden changes in diet are dangerous. What the ſtomach has been long accuſtomed to digeſt, though leſs wholeſome, will agree better with it than food of a more ſalutary nature to which it has not been uſed. When therefore a change becomes neceſſary, it ought always to be made gradually; ſudden tranſition from a poor and low, to a rich and luxurious diet, or the contrary, might ſo diſturb the functions of the body as to endanger health, or even to occaſion death itſelf.

When we recommend regularity in diet, we would not be underſtood as condemning every ſmall deviation from it. It is next to impoſſible for people at all times to avoid ſome degree of exceſs, and living too much by rule might make even the ſmalleſt deviation dangerous. It may therefore be prudent to vary a little, ſometimes taking more, ſometimes leſs, than the uſual quantity of meat and drink, provided always that a due regard be had to moderation.

Some authors have entered into minute details reſpecting the various qualities of food; this to me appears unneceſſary. That which every perſon, from experience, has found to agree beſt with him, is a more juſt criterion to judge by, than any ſpeculative compariſon of the nutriment of different aliments. People

however ſhould not eat or drink indiſcriminately whatever chance may throw in their way; but enjoy thoſe bleſſings which Providence has ſent us in a rational manner.

CHAP. IV.

OF AIR.

UNWHOLESOME air is a very common cauſe of diſeaſes. Few are aware of the danger ariſing from it. People generally pay ſome attention to what they eat or drink, but ſeldom regard what goes into the lungs, though the latter proves often more ſuddenly fatal than the former.

Air as well as water, takes up parts of moſt bodies with which it comes in contact, and is often ſo repleniſhed with thoſe of noxious quality, as to occaſion immediate death. But ſuch violent effects ſeldom happen, as people are generally on their guard againſt them. The leſs perceptible influences of bad air prove more generally hurtful to mankind; we ſhall therefore endeavour to point out ſome of theſe, and to ſhew whence the danger chiefly ariſes.

Air may become noxious many ways. Whatever greatly alters its degree of heat, cold, moiſture, &c. renders it unwholeſome: for example, that which is too hot diſſipates the watery parts of the blood, exalts the bile, and renders the whole humours aduſt and thick. Hence proceed bilious and inflammatory fevers, cholera morbus, &c. Very cold air obſtructs the perſpiration, conſtringes the ſolids, and condenſes the fluids. It occaſions rheumatiſms, coughs, and catarrhs, with other diſeaſes of the throat and breaſt. Air that is too moiſt deſtroys the elaſticity or ſpring of the ſolids, induces phlegmatic or lax conſtitutions, and diſpoſes the body to agues, or intermitting fevers, dropſies, &c.

Wherever great numbers of people are crowded into one place, if the air has not a free circulation, it ſoon becomes unwholeſome. Hence it is that delicate perſons are apt to turn ſick or faint in crowded churches, aſſemblies, or any other place where the air is injured by breathing, fires, candles, or the like.

In great cities ſo many things tend to contaminate the air, that it is no wonder it proves ſo fatal to the inhabitants. The air in cities is not only breathed repeatedly over, but is likewiſe loaded with ſulphur, ſmoke, and other exhalations, beſide the vapours continually ariſing from innumerable putrid ſubſtances, as dunghills, ſlaughter houſes, &c. All poſſible care ſhould be taken to keep the ſtreets of large towns open and wide, that the air may have a free current through them. They ought likewiſe to be kept very clean. Nothing tends more to pollute and contaminate the air of a city than dirty ſtreets.

It is very common in this country to have churchyards in the middle of populous cities. Whether this be the effect of ancient ſuperſtition, or owing to the increaſe of ſuch towns, is a matter of no conſequence. Whatever gave riſe to the cuſtom, it is a bad one. It is habit alone which reconciles us to theſe things; by means of which the moſt ridiculous, nay pernicious cuſtoms, often become ſacred. Certain it is, that thouſands of putrid carcaſes, ſo near the ſurface of the earth in a place where the air is confined, cannot fail to taint it; and that ſuch air, when breathed into the lungs, muſt occaſion diſeaſes †.

Burning within churches is a practice ſtill more deteſtable. The air in churches is ſeldom good, and the effluvia from putrid carcaſſes muſt render it ſtill worſe. Churches are commonly old buildings with arched roofs. They are ſeldom open above once a week, are never

† In most eastern countries it was customary to bury the dead at some distance from any town. As this practice obtained among the Jews, the Greeks, and also the Romans, it is strange that the western part of Europe should not have followed their example in a custom so truly laudable.

ventilated by fires nor open windows, and rarely kept clean. This occaſions that damp, muſty, unwholeſome ſmell which one feels upon entering a church, and renders it a very unſafe place for the weak and valetudinary. Theſe inconveniences might, in a great meaſure, be obviated, by prohibiting all perſons from burying within churches, by keeping them clean, and permitting a ſtream of freſh air to paſs frequently through them, by opening oppoſite doors and windows.

Wherever air ſtagnates long, it becomes unwholeſome. Hence the unhappy perſons confined in jails not only contract malignant fevers themſelves, but often communicate them to others. Nor are many of the holes, for we cannot call them houſes, poſſeſſed by the poor in great towns, much better than jails. Theſe low dirty habitations are the very lurking places of bad air and contagious diſeaſes. Such as live in them ſeldom enjoy good health; and their children commonly die young. In the choice of a houſe, thoſe who have it in their power ought always to pay the greateſt attention to open free air.

The various methods which luxury has invented to make houſes cloſe and warm, contribute not a little to render them unwholeſome. No houſe can be wholeſome unleſs the air has a free paſſage through it. For which reaſon, houſes ought daily to be ventilated, by opening oppoſite windows, and admitting a current of freſh air into every room. Beds, inſtead of being made up as ſoon as the people riſe out of them, ought to be turned down, and expoſed to the freſh air from the open windows through the day. This would expel any noxious vapour, and could not fail to promote the health of the inhabitants.

In hoſpitals, jails, ſhips, &c. where that cannot be conveniently done, ventilators ſhould be uſed. The method of expelling foul, and introducing freſh air, by means of ventilators, is a moſt ſalutary invention, and is indeed the moſt uſeful of all our modern medical improvements. It is capable of univerſal application, and is fraught with numerous advantages, both to thoſe in

health and ſickneſs. In all places, where numbers of people are crowded together, ventilation becomes abſolutely neceſſary.

Air which ſtagnates in mines, wells, cellars, &c. is extremely noxious. That kind of air is to be avoided as the moſt deadly poiſon. It often kills almoſt as quickly as lightning. For this reaſon people ſhould be very cautious in opening cellars that have been long ſhut, or going down into deep wells or pits, eſpecially if they have been kept cloſe covered*.

Many people who have ſplendid houſes, chuſe to ſleep in ſmall apartments. This conduct is very imprudent. A bed chamber ought always to be well aired; as it is generally occupied in the night only, when all doors and windows are ſhut. If a fire be kept in it, the danger from a ſmall room becomes ſtill greater. Numbers have been ſtifled when aſleep by a fire in a ſmall apartment, which is always hurtful.

Thoſe who are obliged, on account of buſineſs, to ſpend the day in cloſe towns, ought if poſſible, to ſleep in the country. Breathing free air in the night will, in ſome meaſure, make up for the want of it through the day. This practice would have a greater effect in preſerving the health of citizens than is commonly imagined.

Delicate perſons ought, as much as poſſible, to avoid the air of great towns. It is peculiarly hurtful to the aſthmatic and conſumptive. Such perſons ſhould avoid cities as they would the plague. The hypochondriac are likewiſe much hurt by it. I have often ſeen perſons ſo much afflicted with this malady while in town, that it ſeemed impoſſible for them to live, who, upon being removed to the country, were immediately relieved. The ſame obſervation holds with regard to nervous and hyſteric women. Many people, indeed,

* We have daily accounts of persons who lose their lives by going down into deep wells and other places where the air stagnates; all these accidents might be prevented by only letting down a lighted candle before them, and stopping when they perceive it go out; yet this precaution, simple as it is, is seldom used.

have it not in their power to change their ſituation in queſt of better air. All we can ſay to ſuch perſons is, that they ſhould go as often abroad into the open air as they can, that they ſhould admit freſh air frequently into their houſes, and take care to keep them very clean.

It was neceſſary in former times, for ſafety, to ſurround cities, colleges, and even ſingle houſes with high walls. Theſe, by obſtructing the free current of air, never fail to render ſuch places damp and unwholeſome. As ſuch walls are now, in moſt parts of this country, become uſeleſs, they ought to be pulled down, and every method taken to admit a free paſſage to the air. Proper attention to Air and Cleanlineſs would tend more to preſerve the health of mankind than all the preſcriptions of the Faculty.

Surrounding houſes too cloſely with planting or thick woods, likewiſe tend to render the air unwholeſome. Wood not only obſtructs the free current of the air, but ſends forth great quantities of moiſt exhalations, which render it conſtantly damp. Wood is very agreeable at a proper diſtance from a houſe, but ſhould never be planted too near it, eſpecially in a flat country. Many of the gentlemen's ſeats in England are rendered very unwholeſome from the great quantity of wood which ſurrounds them.

Houſes ſituated in low marſhy countries, or near large lakes of ſtagnating water, are likewiſe unwholeſome. Waters which ſtagnate not only render the air damp, but load it with putrid exhalations, which produce the moſt dangerous and fatal diſeaſes. Thoſe who are obliged to inhabit marſhy countries, ought to make choice of the dryeſt ſituations they can find, to live generouſly, and to pay the ſtricteſt regard to cleanlineſs.

If freſh air be neceſſary for thoſe in health, it is ſtill more ſo for the ſick, who often loſe their lives for want of it. The notion that ſick people muſt be kept very hot, is ſo common, that one can hardly enter the chamber where the patient lies, without being ready to faint by reaſon of the hot ſuffocating ſmell. How this muſt

affect the ſick, any one may judge. No medicine is ſo beneficial to the ſick as freſh air. It is the moſt reviving of all cordials, if it be adminiſtered with prudence. We are not, however, to throw open doors and windows at random upon the ſick. Freſh air is to be let into the chamber gradually, and if poſſible by opening the windows of ſome other apartment.

The air of a ſick perſon's chamber may be greatly freſhened, and the patient much revived, by ſprinkling the floor, bed, &c. frequently with vinegar, juice of lemon, or any other ſtrong vegetable acid.

In places where numbers of ſick are crowded into the ſame houſe, or which is often the caſe into the ſame apartment, the frequent admiſſion of freſh air becomes abſolutely neceſſary. Infirmaries, hoſpitals, &c. are often rendered ſo noxious, for want of proper ventilation, that the ſick run more hazard from them than from the diſeaſe. This is particularly the caſe when putrid fevers, dyſentries, and other infectious diſeaſes, prevail.

Phyſicians, ſurgeons, and others who attend hoſpitals, ought, for their own ſafety, to take care that they be properly ventilated. Such perſons as are obliged to pend moſt of their time amongſt the ſick, run great hazard of being themſelves infected when the air is bad. All hoſpitals, and places of reception for the ſick, ought to have an open ſituation, at ſome diſtance from any great town, and ſuch patients, as labour under any infectious diſeaſe ought never be ſuffered to come near the reſt †.

Great attention has of late years been paid in ſelecting proper ſcites for erecting hoſpitals, as well as to keep them properly ventilated; but the interment of the dead in the middle of crowded towns, is not yet done away. The antients never interred their dead in

† A year ſeldom paſſes that we do not hear of ſome hoſpital phyſician or ſurgeon having loſt his life by an hoſpital fever caught from his patients. For this they have themſelves alone to blame. Their patients are either in an improper ſituation, or they are too careleſs with regard to their own conduct.

churches or church yards; this is evident from the firſt words, "ſiſte viator," ſtop traveller, on the old Roman tomb ſtones; and is a proof that they interred their dead, not in temples or churches, but adjoining the road ſide. The late Joſeph II. paſſed a law on this ſubject, which does him great honour, forbidding the interment of the dead in places of public worſhip. He remarks: "It is horrid that a place of worſhip, a "temple of the Supreme Being, ſhould be converted "into a peſt houſe for living creatures! A perſon who "upon his death bed, makes it a condition of his will "to be buried in a church or chapel, acts like a mad "man; he ought to ſet his fellow creatures a good ex- "ample, and not to do all in his power to deſtroy "their conſtitution, by expoſing them to the effluvia "ariſing from a corpſe in a ſtate of putrefaction."

A ſtriking inſtance is afforded in a fair country woman of our own, to the folly and ſtuperſtition ſtigmatized by the emperor. Regardleſs of the prejudices of cuſtom, this exalted female, by her will directed her body to be burnt; being aware as ſhe ſays, "that the bodies of "the dead might be offenſive to the living." Her aſhes ſhe directed to be preſerved in an urn, and depoſited in the burial ground of St. George, Hanover Square. This happened a few years ago.

CHAP. V.

OF EXERCISE.

MANY people look upon the neceſſity man is under of earning his bread by labour, as a curſe. Be hat as it may, it is evident from the ſtructures of the ody, that exerciſe is not leſs neceſſary than food for he preſervation of health; thoſe whom poverty obliges o labour for daily bread, are not only the moſt healthy, ut generally the moſt happy part of mankind. Induſtry

ſeldom fails to place them above want, and activity ſerves them inſtead of phyſic. This is peculiarly the caſe with thoſe who live by the culture of the ground. The great increaſe of inhabitants in infant colonies, and the longevity of ſuch as follow agriculture, every where evidently prove it to be the moſt healthful as well as the moſt uſeful employment.

The love of activity ſhews itſelf very early in man. So ſtrong is this principle, that a healthy youth cannot be reſtrained from exerciſe even by the fear of puniſhment. Our love of motion is ſurely a ſtrong proof of its utility. Nature implants no diſpoſition in vain. It ſeems to be a catholic law throughout the whole animal creation, that no creature, without exerciſe, ſhould enjoy health, or be able to find ſubſiſtence. Every creature, except man, takes as much of it as is neceſſary. He alone of ſuch animals as are under his direction, deviate from his original law, and they ſuffer accordingly.

Inactivity never fails to induce an univerſal relaxation of the ſolids, which diſpoſes the body to innumerable diſeaſes. When the ſolids are relaxed, neither the digeſtion nor any of the ſecretions can be duly performed. In this caſe the worſt conſequences muſt enſue. How can perſons who loll all day in eaſy chairs, and ſleep all night on beds of down, fail to be relaxed? Nor do ſuch greatly mend the matter, who never ſtir abroad but in a coach, ſedan, or ſuch like. Theſe elegant pieces of luxury are become ſo common, that the inhabitants of great towns ſeem to be in ſome danger of loſing the uſe of their limbs altogether. It is now below any one to walk who can afford to be carried. How ridiculous would it ſeem to a perſon unacquainted with modern luxury to behold the young and healthy ſwinging along on the ſhoulders of their fellow creatures! or to ſee a fat carcaſe, over run with diſeaſes occaſioned by inactivity, dragged through the ſtreets by half a dozen horſes †.

† It is not neceſſity, but faſhion, which makes the uſe of carriages

Fig. 1.

Head of Fig. 2.

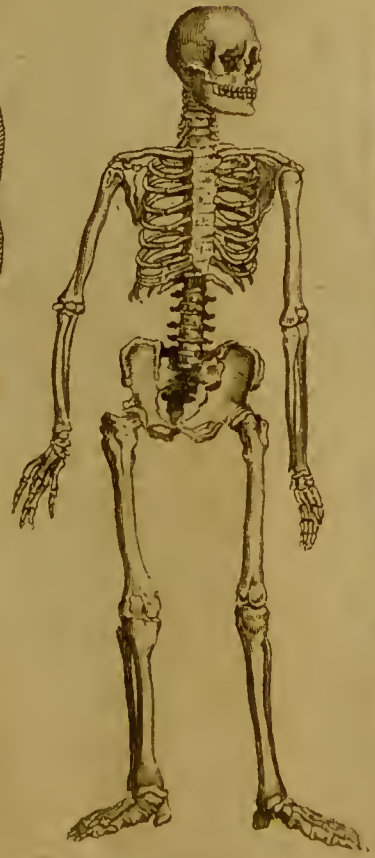
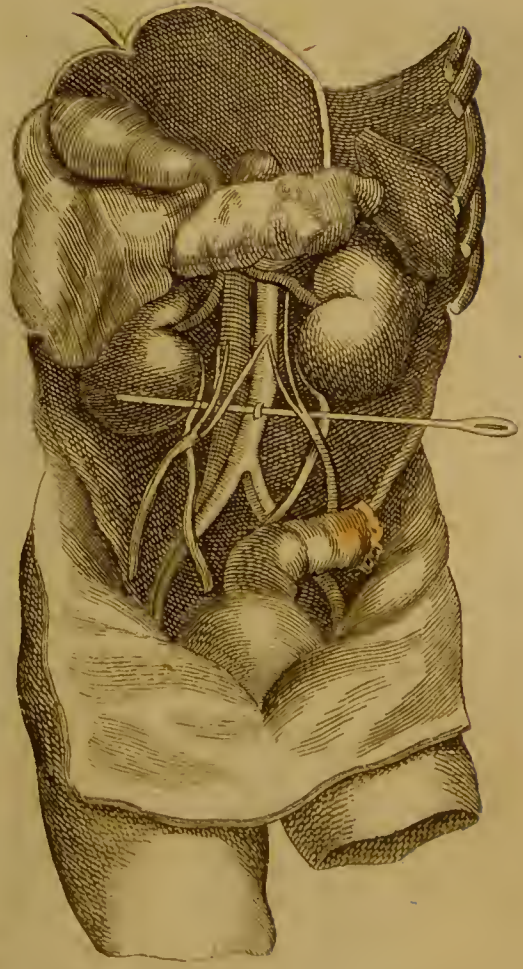


Fig. 2.



Head of Fig I

Human Skeleton — *The* Brain *& different* Viscera.

Glandular obſtructions, now ſo common, generally proceed from inactivity. Theſe are the moſt obſtinate of maladies. So long as the liver, kidneys, and other glands duly perform their functions, health is ſeldom impaired; but when they fail, nothing can reſtore it. Exercise is almoſt the only cure we know for glandular obſtructions; indeed, it does not always ſucceed as a remedy: but there is reaſon to believe that it would ſeldom fail to prevent theſe complaints, were it uſed in due time. One thing is certain, that, amongſt thoſe who take ſufficient exerciſe, glandular diſeaſes are very little known; whereas the indolent and inactive are ſeldom free from them.

Weak nerves are the conſtant companions of inactivity. Nothing but exerciſe and open air can brace and ſtrengthen the nerves, or prevent the endleſs train of diſeaſes which proceed from a relaxed ſtate of theſe organs. We ſeldom hear the active and laborious complain of nervous diſeaſes; theſe are reſerved for the ſons of eaſe and affluence. Many have been completely cured of theſe diſorders by being reduced, from a ſtate of opulence, to labour for their daily bread. This plainly points out the ſources from whence nervous diſeaſes flow and the means by which they may be prevented.

It is abſolutely impoſſible to enjoy health where the perſpiration is not duly carried on; but this can never be the caſe where exerciſe is neglected. When the matter which ought to be thrown off by perſpiration is retained in the body, it vitiates the humours, and occaſions the gout, fevers, rheumatiſm, &c. Exerciſe alone would prevent many of thoſe diſeaſes which cannot be cured, and would remove others where medicine proves ineffectual.

common. There are many people who have not exercise enough to keep their humours from stagnation, who yet dare not venture to make a visit to their next neighbour, but in a coach or sedan, lest they should be looked down upon. Strange, that men should be such fools as to be laughed out of the use of their limbs, or to throw away their health in order to gratify a piece of vanity, or to comply with a ridiculous fashion!

A late author*, in his excellent treatiſe on Health, ſays, that the weak and valetudinary ought to make exerciſe a part of their religion. We would recommend this, not only to the weak and valetudinary, but to all whoſe buſineſs does not oblige them to take ſufficient exerciſe, as ſedentary artificers†, ſhopkeepers, ſtudious perſons, &c. Such ought to uſe exerciſe as regularly as they take food. This might generally be done without any interruption to buſineſs or real loſs of time.

No piece of indolence hurts the health more than the modern cuſtom of lying a bed too long in the morning. This is the general practice in great towns. The inhabitants of cities ſeldom riſe before eight or nine o'clock; but the morning is undoubtedly the beſt time for exerciſe, while the ſtomach is empty, and the body refreſhed with ſleep. Beſides, the morning air braces and ſtrengthens the nerves, and in ſome meaſure, anſwers the purpoſe of a cold bath. Let any one who has been accuſtomed to lie a bed till eight or nine o'clock, riſe by ſix or ſeven, ſpend a couple of hours in walking, riding, or any active diverſion without doors, and he will find his ſpirits cheerful and ſerene through the day, his appetite keen, and his body braced and ſtrengthened. Cuſtom ſoon renders early riſing agreeable, and nothing contributes more to the preſervation of health.

The inactive are continually complaining of pains of the ſtomach, flatulencies, indigeſtions, &c. Theſe com-

* Cheyne.

† Sedentary occupations ought chiefly to be followed by women. They bear confinement much better than men, and are fitter for every kind of business which does not require much strength. It is ridiculous enough to see a lusty fellow making pins, needles, or watch wheels, while many of the laborious parts of husbandry are carried on by the other sex. The fact is we want men for laborious employments, while one half of the other sex are rendered useless for want of occupations suited to their strength, &c. Were girls bred to mechanical employments, we would not see such numbers of them prostitute themselves for bread, nor find such a want of men for the important purposes of navigation, agriculture, &c. An eminent silk manufacturer told me that he found women answer better for that business than men; and that he had lately taken a great many girls apprentices as silk weavers. I hope this example will be followed by many others.

plaints, which pave the way to many others, are not to be removed by medicines. They can only be cured by a vigorous courſe of exerciſe, to which indeed they ſeldom fail to yield.

Exerciſe, if poſſible, ought always to be taken in the open air. When that cannot be done, various methods may be contrived for exerciſing the body within doors, as the dumb bell, dancing, fencing, &c. It is not neceſſary to adhere ſtrictly to any particular kind of exerciſe. The beſt way is to take them by turns, and to uſe that longeſt which is moſt ſuitable to the ſtrength and conſtitution. Thoſe kinds of exerciſe which give action to moſt of the bodily organs, are always to be preferred, as walking, running, riding, digging, ſwimming, and ſuch like.

It is much to be regretted, that active and manly diverſions are now ſo little practiſed. Diverſions make people take more exerciſe than they otherwiſe would do, and are of the greateſt ſervice to ſuch as are under the neceſſity of labouring for their bread. As active diverſions loſe ground, thoſe of a ſedentary kind ſeem to prevail. Sedentary diverſions are of no other uſe but to conſume time. Inſtead of relieving the mind, they often require more thought than either ſtudy or buſineſs. Every thing that induces people to ſit ſtill, unleſs it be ſome neceſſary employment, ought to be avoided.

The diverſions which afford the beſt exerciſe are hunting, ſhooting, playing at cricket, hand ball, golff*, &c. Theſe exerciſe the limbs, promote perſpiration, and the other ſecretions. They likewiſe ſtrengthen the lungs, and give firmneſs and agility to the whole body.

Such as can, ought to ſpend two or three hours a-day on horſeback; thoſe who cannot ride, ſhould employ the ſame time in walking. Exerciſe ſhould never be

* Golff is a diverſion very common in North Britain. It is well calculated for exercising the body, and always may be taken in such moderation, as neither to over heat nor fatigue. It has greatly the preference over cricket, tennis, or any of those games which cannot be played without violence.

continued too long. Over fatigue prevents the benefit of excerciſe, and inſtead of ſtrengthening the body tends to weaken it.

Every man ſhould lay himſelf under ſome ſort of neceſſity to take exerciſe. Indolence, like other vices, when indulged, gains ground, and at length becomes agreeable. Hence many who were fond of exerciſe in the early part of life, become quite averſe from it afterwards. This is the caſe of moſt hypochondriac and gouty people, which renders their diſeaſes in a great meaſure incurable.

In ſome countries, laws have been made, obliging every man, of whatever rank, to learn ſome mechanical employment. Whether ſuch laws were deſigned for the preſervation of health, or the encouragement of manufacture, is a queſtion of no importance. Certain it is, that if gentlemen were frequently to amuſe and exerciſe themſelves in this way, it might have many good effects. They would at leaſt derive as much honour from a few maſterly ſpecimens of their own workmanſhip, as from the character of having ruined moſt of their companions by gaming or drinking. Beſides men of leiſure, by applying themſelves to the mechanical arts, might improve them, to the great benefit of ſociety.

Indolence not only occaſions diſeaſes, and renders men uſeleſs to ſociety, but promotes all manner of vice. To ſay a man is idle, is little better than to call him vicious. The mind, if not engaged in ſome active purſuit, is conſtantly in queſt of ideal pleaſures, or impreſſed with the apprehenſion of ſome imaginary evil. From theſe ſources proceed moſt of the miſeries of mankind. Certainly man was never intended to be idle. Inactivity fruſtrates the very deſign of his creation; whereas an active life, is the beſt guardian of virtue, and the greateſt preſervative of health.

It is evidently deſigned by Nature, that the love of food, as well as of motion, ſo inherent in every animal from the time of its birth, ſhould operate as its preſervation. The ſluggard hopes in vain for enjoyment

in the lap of indolence; he is a rebel to the laws of Nature, and deſerves her ſevereſt reproaches; every ſource of delight is contaminated by its influence, and it not only cauſes a diſeaſe, but occaſions them to be nearly incurable.

CHAP. VI.

OF SLEEP AND CLOTHING.

SLEEP, as well as diet, ought to be duly regulated. Too little ſleep weakens the nerves, exhauſts the ſpirits, and occaſions diſeaſes; and too much renders the mind dull, the body groſs, and diſpoſes to apoplexies, lethargies, and other complaints of a ſimilar nature. A medium ought therefore to be obſerved; but this is not eaſy to fix. Children require more ſleep than grown perſons, the laborious than the idle and ſuch as eat and drink freely, than thoſe who live abſtemiouſly. Beſides, the real quantity of ſleep cannot be meaſnred by time; as one perſon will be more refreſhed by five or ſix hours ſleep, than other by eight or ten.

Children may always be allowed to take as much ſleep as they pleaſe; but for adults, ſix or ſevens hours is certainly ſufficient, and no one ought to exceed eight. Thoſe who lie a bed more than eight hours may slumber, but they can hardly be ſaid to ſleep; ſuch generally toſs and dream away the forepart of the night, ſink to reſt towards morning, and doſe till noon. The beſt way to make ſleep ſound and refreſhing, is to riſe betimes. The cuſtom of lying a bed for nine or ten hours, not only makes the ſleep leſs refreſhing, but relaxes the ſolids, and greatly weakens the conſtitution.

Nature points out night as the proper ſeaſon for ſleep. Nothing more certainly deſtroys the conſtitution than night watching. It is a great pity that a practice ſo deſtructive to health ſhould be ſo much in faſhion. How

quickly the want of reſt in due ſeaſon will blaſt the moſt blooming complexion, or ruin the beſt conſtitution, is evident from the ghaſtly countenances of thoſe, who, as the phraſe is, turn day into night, and night into day.

To make ſleep refreſhing, the following things are requiſite: Firſt, to take ſufficient exerciſe in the open air; to avoid ſtrong tea or coffee; next, to eat a light ſupper; and laſtly, to lie down with a mind as cheerful and ſerene as poſſible.

It is certain that too much exerciſe will prevent ſleep, as well as too little. We ſeldom however hear the active and laborious complain of reſtleſs nights. It is the indolent and ſlothful who generally have theſe complaints. Is it any wonder that a bed of down ſhould not be refreſhing to a perſon who ſits all day in an eaſy chair? A great part of the pleaſure of life conſiſts in alternate reſt and motion; but they who neglect the latter can never reliſh the former. The labourer enjoys more true luxury in plain food and ſound ſleep, than is to be found in ſumptuous tables and downy pillows, where exerciſe is wanting.

That light ſuppers cauſe ſound ſleep, is true even to a proverb. Many perſons, if they exceed the leaſt at that meal, are ſure to have uneaſy nights; and, if they fall aſleep, the load and oppreſſion on their ſtomach and ſpirits occaſion frightful dreams, broken and diſturbed repoſe, the night mare, &c. Were the ſame perſons to go to bed with a light ſupper, or ſit up till that meal was pretty well digeſted, they would enjoy ſound ſleep, and riſe refreſhed and cheerful. There are indeed ſome people who cannot ſleep unleſs they have eat ſome ſolid food at night; but this does not imply the neceſſity of a heavy ſupper: beſides, theſe are generally perſons who have accuſtomed themſelves to this method, and who do not take a ſufficient degree of exerciſe.

Nothing more certainly diſturbs our repoſe than anxiety. When the mind is not at eaſe, one ſeldom enjoys ſound ſleep. This greateſt of human bleſſings flies the

wretched, and viſits the happy, the cheerful, and the gay. This is a ſufficient reaſon why every man ſhould endeavour to be as eaſy in his mind a poſſible when he goes to reſt. Many, by indulging grief and anxious thought, have baniſhed ſound ſleep ſo long, that they could never afterwards enjoy it.

Sleep, when taken in the fore-part of the night, is generally reckoned moſt refreſhing. Whether this be the effect of habit or not, is hard to ſay; but as moſt people are accuſtomed to go early to bed when young, it may be preſumed that ſleep, at this ſeaſon, will prove moſt refreſhing to them ever after. Whether the fore-part of the night be beſt for ſleep or not, ſurely the fore-part of the day is fitteſt both for buſineſs and amuſement. I hardly ever knew an early riſer who did not enjoy a good ſtate of health *.

To riſe early it is neceſſary to go early to bed, both of which become habitual, and evince ſobriety, regularity, and an exemption from diſſipation. He who retires to reſt at an early hour, has not time to partake of what is called the pleaſures of the table; but unlike the votary of Bacchus, he enjoys his reſt undiſturbed. He requires no opiates. His ſleep is ſound, occaſioned by tranquility of body and mind, temperance and exerciſe. Fully refreſhed, he riſes in the morning, vigorous and cheerful, to breathe the pure air, and go through his daily occupation. Nothing, in a word, can more certainly contribute to health and longevity as a cuſtom of going to bed and riſing early.

Of Clothing.

The clothing ought to be ſuited to the climate. Cuſtom has no doubt a very great influence in this article;

* Men of every occupation, and in every ſituation in life, have lived to a good old age; nay, ſome have enjoyed this bleſſing whoſe plan of living was by no means regular; but it conſiſts with obſervation, that all very old men have been early riſers. This is the only circumſtance attending longevity to which I never knew an exception.

but no cuſtom can never change the nature of things ſo far as to render the ſame clothing fit for an inhabitant of Nova Zembla and the iſland of Jamaica. It is not indeed neceſſary to obſerve an exact proportion between the quantity of clothes we wear, and the degree of latitude which we inhabit; but at the ſame time, proper attention ought to be paid to it, as well as the openneſs of the country, the frequency and violence of ſtorms, &c.

In youth, while the blood is hot and the perſpiration free, it is neceſſary to cover the body with a great quantity of clothes; but in the decline of life when the ſkin becomes rigid and the humours more cool, the clothing ſhould be increaſed. Many diſeaſes in the latter period of life proceed from a defect of perſpiration; theſe may in ſome meaſure be prevented by a ſuitable addition to the clothing, or by wearing ſuch as are better calculated for promoting the diſcharge from the skin, as clothes made of cotton, flannel, &c.

The clothing ought likewiſe to be ſuited to the ſeaſon of the year. Clothing may be warm enough for ſummer, which is by no means ſufficient for winter. The greateſt caution, however, is neceſſary in making theſe changes. We ought neither to put off our winter clothes too ſoon, nor to wear our ſummer ones too long. In this country, the winter often ſets in very early with great rigour, and we have frequently cold weather even after the commencement of the ſummer months. It would likewiſe be prudent not to make the changes all at once, but to do it gradually; and indeed the changes of apparel in this climate ought to be very inconſiderable, eſpecially among thoſe who have paſſed the meridian of life †.

† *That colds kill more than plagues,* is an old obſervation; and, with regard to this country, it holds ſtrictly true. Every perſon of diſcernment, however, will perceive, that moſt of the colds which prove ſo deſtructive to the inhabitant of Britain, are owing to their imprudence in changing clothes. A few warm days in March or April induce them to throw off their winter garments without conſidering that our moſt penetrating colds generally happen in May.

Clothes often become hurtful by their being made ſubſervient to the purpoſes of pride or vanity. Manfiind in all ages ſeem to have conſidered clothes in this view; according their faſhion and figure have been continually varying with very little regard either to health, the climate, or conveniency; a farthingale, for example, may be very neceſſary in hot ſouthern climates, but ſurely nothing can be more ridiculous in the cold regions of the north.

Even the human ſhape is often attempted to be mended by dreſs, and thoſe who know no better, believe that mankind would be monſters without its aſſiſtance. All attempts of this nature are highly pernicious. The moſt deſtructive of them in this country is that of ſqueezing the ſtomach and bowels into as narrow a compaſs as poſſible, to procure, what is falſely called a fine ſhape §. By this practice, the action of the ſtomach and bowels, the motion of the heart and lungs, and almoſt all the vital functions, are obſtructed. Hence proceed indigeſtions, ſyncopes or fainting fits, coughs, conſumptions of the lungs, and other complaints ſo common among females.

The feet likewiſe often ſuffer by preſſure. How a ſmall foot came to be reckoned genteel, I will not pretend to ſay; but certain it is, that this notion has made many perſons lame. Almoſt nine-tenths of mankind are troubled with corns; a diſeaſe that is ſeldom or never occaſioned but by ſtrait ſhoes. Corns are not only very troubleſome, but by rendering people unable to walk, they may likewiſe be conſidered as the remote cauſe of other diſeaſes †.

§ Matrons in almost every country have adopted this infatuation; and the Roman mothers are ridiculed by Terence, the comedian, for following this absurd custom.

† We often see persons, who are rendered quite lame by the nails of their toes having grown into the flesh, and frequently hear of mortifications proceeding from this cause. All these, and many other inconveniences attending the feet must be imputed, solely to the use of short and strait shoes.

The proper and only safe method of curing corns, is to soak the foot in warm water, and to cut the corn, repeating the operation once a-week till the scarf skin is restored to its former thinness; and the patient must afterwards be careful not to use strait shoes.

The ſize and figure of the ſhoe ought certainly to be adapted to the foot. In children the feet are as well ſhaped as the hands, and the motion of the toes free and eaſy as that of the fingers; yet few perſons in the advanced period of life are able to make any uſe of their toes. They are generally, by narrow ſhoes, ſqueezed all of a heap, and often laid over one another in ſuch a manner as to be rendered altogether incapable of motion. Nor is the high heel leſs hurtful than the narrow toe. A lady may ſeem taller for walking on her tiptoes, but ſhe will never walk well in this manner. It ſtrains her joints, diſtorts her limbs, makes her ſtoop, and utterly deſtroys all her eaſe and gracefulneſs of motion; it is entirely owing to ſhoes with high heels and narrow toes, that not one female in ten can be ſaid to walk well.

In fixing on the clothes, due care ſhould be taken to avoid all tight bandages. Garters, buckles, &c. when drawn too tight, not only prevent the free motion and uſe of the parts about which they are bound, but likewiſe obſtruct the circulation of the blood, which prevents the equal nouriſhment and growth of theſe parts and occaſions various diſeaſes. Tight bandages about the neck, as ſtocks, cravats, necklaces, &c. are extremely dangerous. They obſtruct the blood in its courſe from the brain, by which means head achs, vertigoes, apoplexies, and other fatal diſeaſes are often occaſioned.

The perfection of dreſs is to be eaſy and clean. Nothing can be more ridiculous, than for one to make himſelf a ſlave to fine clothes. Such a one, and many ſuch there are, would rather remain as fixed as a ſtatue from morning till night, than diſcompoſe a ſingle hair or alter the poſition of a pin. Were we to recommend any particular pattern for dreſs, it would be that which is worn by the people called Quakers. They are always neat, clean, and often elegant, without any thing ſuperfluous. What others lay out upon tawdry laces, ruffles, and ribbons, they beſtow upon ſuperior cleanlineſs. Finery is only the affectation of dreſs, and very often covers a greal of dirt.

We ſhall only add, with regard to clothing, that it ught not only to be ſuited to the climate, the ſeaſon of ne year, and the period of life, but likewiſe to the tem- erature and conſtitution. Robuſt perſons are able to ndure either cold or heat better than the delicate; con- equently muſt be leſs attentive to their clothing. But ne preciſe quantity of clothes neceſſary for any perſon annot be determined by reaſoning. It is entirely a natter of experience, and every man is the beſt judge or himſelf what quantity of clothes is neceſſary to eep him warm ‡.

Of late years a reformation has taken place in female reſs, at once beneficial to the health, and honourable o the taſte of our fair countrywomen. Elegant ſim- licity has ſucceeded to capricious abſurdity. The iſtorture of cloſe ſtays is aboliſhed, and the body left o its natural ſhape, the dangerous, and aukward poſi- on of the foot, treading on the tip toe in high-heeled oes, has given place to the flat heel, when the wearer an walk with firmneſs, eaſe, and grace; Nature and ood ſenſe have reſumed their dominion.

The men have not been equally happy. The mili- ry ideas ſo generally prevaleut during the late and reſent wars, have introduced a ſyſtem of dreſs, in hich martial ſmartneſs is more ſtudied than either mfort or real taſte. The tremendous hat cannot be orn for a conſiderable time without pain; the neck ridiculously and unhealthfully bolſtered up and cloſe- bandaged, ſo as to interrupt the circulation of the lood and occaſion eruptions and blotches in the face, ead achs, apoplexies, not unfrequently the occaſion of remature death. To this is added, literally, a ſtrait aiſtcoat, and breeches ſo buttoned and tied at the

‡ The celebrated Boerhave used to say, that nobody suffered by ld save fools and beggars; the latter not being able to procure thes and the former not having sense to wear them: Be this as may, I can with the strictest truth declare, that in many cases, here the powers of medicine have been tried in vain, I have cured patient by recommending thick shoes, a flannel waistcoat, and awers, a pair of under stockings, or a flannel petticoat, to be worn ring the cold season at least.

knees, as to prevent the neceſſary freedom of motion; the legs are compreſſed in boots, or, when ſhoes are worn, they are ſometimes ſquare toed, ſometimes ſharp pointed; every thing in ſhort is conſulted but the ſhape and free play of the foot. Cramps and corns inevitably ſucceed, and the votary of faſhion too late repents the ſacrifices made to her caprice.

CHAP. VII.

OF INTEMPERANCE.

A MODERN author§ obſerves, that temperance and exerciſe are the two beſt phyſicians in the world. He might have added, that if theſe were duly regarded, there would be too little occaſion for any other. Temperance may juſtly be called the parent of health; yet numbers of mankind act as if they thought diſeaſes and death too ſlow in their progreſs, and by intemperance and debauch ſeem as if it were to ſolicit their approach.

The danger and intemperance appears from the very conſtruction of the human body. Health depends on that ſtate of the ſolids and fluids that fits them for the due performance of the vital functions; and while theſe go regularly on, we are ſound and well; but whatever diſturbs them neceſſarily impairs health. Intemperance never fails to diſorder the whole animal œconomy; it hurts the digeſtion, relaxes the nerves, renders the different ſecretions irregular, vitiates the humours, and occaſions numberleſs diſeaſes.

The analogy between the nouriſhment of plants and animals affords a ſtriking proof of the danger of intemperance. Moiſture and manure greatly promote vegetation; yet an over quantity of any will entirely deſtroy it. The beſt things become hurtful, nay deſtructive, when carried to exceſs. Hence we learn, that the higheſt degree of human wiſdom conſiſts in regulating

§ Rousseau.

ur appetites and paſſions ſo as to avoid all extremes. It is that chiefly which entitles us to the character of rational beings. The ſlave of appetite will ever be the diſgrace of human nature.

The Author of Nature hath endued us with various paſſions, for the propagation of the ſpecies, the preſervation of the individual, &c. Intemperance is the abuſe of theſe paſſions; and moderation conſiſts in the proper regulation of them. Men not contented with ſatisfying the ſimple calls of Nature, create artificial wants, and are perpetually in ſearch after ſomething that may gratify them; but imaginary wants can never be gratified. Nature is content with little; but luxury knows no bounds. Hence the epicure, the drunkard, and the debauched ſeldom ſtop in their career till their money or their conſtitution fails; then indeed they generally ſee their error when too late.

It is impoſſible to lay down fixed rules with regard to diet, on account of the different conſtitutions of mankind. The moſt ignorant perſon, however, certainly knows what is meant by exceſs; and it is in the power of every man, if he chooſes, to avoid it.

The great rule of diet is to ſtudy ſimplicity. Nature delights in the moſt plain and ſimple food, and every animal, except man, follows her dictates. Man alone riots at large, and ranſacks the whole creation in queſt of luxuries to his own deſtruction. An elegant writer* of the laſt age ſpeaks thus of intemperance in diet: "For my part, when I behold a faſhionable table "ſet out in all its magnificence, I fancy that I ſee gouts "and dropſies, fevers and lethargies, with other innu"merable diſtempers, lying in ambuſcade among the "diſhes."

Nor is intemperance in other things leſs deſtructive than diet. How quickly does the immoderate purſuit of carnal pleaſures, or the abuſe of intoxicating liquors, ruin the beſt conſtitution! Indeed theſe vices generally go hand in hand. Hence it is that we ſo often

* Addiſon.

behold the votaries of Bacchus and Venus, even before they have arrived at the prime of life, worn out with diſeaſes, and haſtening with ſwift pace to an untimely grave. Did men reflect on the painful diſeaſes and premature deaths which are daily occaſioned by intemperance, it would be ſufficient to make them ſhrink back with horror from the indulgence even of their darling pleaſures.

Intemperance does not hurt its votaries alone; the innocent too often feel the direful effects of it. How many wretched orphans are to be ſeen embracing dunghills, whoſe parents, regardleſs of the future, ſpend in riot and debauch what might have ſerved to bring up their offspring in a decent manner! How often do we behold the miſerable mother, with her helpleſs infants, pining in want, while the cruel father is indulging his inſatiate appetites!

Families are not only reduced to miſery, but even extirpated, by intemperance. Nothing tends ſo much to prevent propagation, and to ſhorten the lives of children, as the intemperance of parents. The poor man who labours all day, and at night lies down contented with his humble fare, can boaſt a numerous offspring, while his pampered lord, ſunk in eaſe and luxury, often languiſhes without an heir to his ample fortunes. Even ſtates and empires feel the influence of intemperance, and riſe or fall as it prevails.

Inſtead of mentioning the different kinds of intemperance, and pointing out their influence upon health, we ſhall only, by way of example, make a few obſervations on one particular ſpecies of that vice, viz. the abuſe of intoxicating liquors.

Every act of intoxication puts nature to the expence or a fever, in order to diſcharge the poiſonous draught. When this is repeated almoſt every day, it is eaſy to foreſee the conſequences. That conſtitution muſt be ſtrong indeed, which is able long to hold out under a daily fever! but fevers occaſioned by drinking do not always go off in a day; they frequently end in an in-

flammation of the breaſt, liver, or brain, and produce fatal effects.

Though the drunkard ſhould not fall by an acute diſeaſe, he ſeldom eſcapes thoſe of a chronic kind. Intoxicating liquors, when uſed to exceſs, weaken the bowels and ſpoil the digeſtion; they deſtroy the power of the nerves, and occaſion paralytic and convulſive diſorders; they likewiſe heat and inflame the blood, deſtroy its balſamic quality, ren ler it unfit for circulation, and the nouriſhment of the body. Hence obſtructions, atrophies, dropſies, and conſumptions of the lungs. Theſe are the common ways in which drunkards make their exit. Diſeaſes of this kind, when brought on by hard drinking, ſeldom admit of a cure.

Many people injure their health by drinking, who ſeldom get drunk. The continual habit of ſoaking, as it is called, though its effects be not ſo violent, is not leſs pernicious. When the veſſels are kept conſtantly full and upon the ſtretch, the different digeſtions can neither be duly performed, nor the humours properly prepared. Hence moſt people of this character are afflicted with the gout, the gravel, ulcerous ſores in the legs, &c. If theſe diſorders do not appear, they are ſeized with low ſpirits, hypochondriacal affections, and other ſymptoms of indigeſtion.

Conſumptions are now ſo common, that it is thought one tenth of the inhabitants of great towns die of that diſeaſe. Hard drinking is no doubt one of the cauſes to which we muſt impute the increaſe of conſumptions. The great quantities of viſcid malt liquor drank by the common people of England, cannot fail to render the blood ſizy and unfit for circulation; from whence proceed obſtructions, and inflammations of the lungs. There are few great ale drinkers who are not phthiſical; nor is that to be wondered at, conſidering the glutinous and almoſt indigeſtible nature of ſtrong ale.

Thoſe who drink ardent ſpirits or ſtrong wine run ſtill greater hazard; theſe liquors heat and inflame the blood, and tear the tender veſſels of the lungs to pieces; yet ſo great is the conſumption of them in this country,

that one would almoſt be induced to think that the inhabitants lived upon them ‡.

The habit of drinking proceeds frequently from misfortunes in life. The miſerable fly to it for relief. It affords them indeed a temporary eaſe. But, alas! this ſolace is ſhort lived; and when it is over, the ſpirits ſink as much below their uſual tone as they had before been raiſed above it. Hence a repetition of the doſe becomes neceſſary, and every freſh doſe makes way for another, till the unahppy wretch becomes a ſlave to the bottle, and at length falls a ſacrifice to what at firſt perhaps was taken only as a medicine. No man is ſo dejected as the drunkard when his debauch is gone off. Hence it is, that thoſe who have the greateſt flow of ſpirits while the glaſs circulates freely, are of all others the moſt melancholy when ſober, and often put an end to their own miſerable exiſtence in a fit of ſpleen.

Drunkenneſs not only proves deſtructive to health, but likewiſe to the faculties of the mind. It is ſtrange that creatures, who value themſelves on account of a ſuperior degree of reaſon to that of brutes, ſhould take pleaſure in ſinking ſo far below them. Were ſuch as voluntarily deprive themſelves of the uſe of reaſon, to continue ever after in that condition, it would ſeem but a juſt puniſhment. Though this be not the conſequence of one act of intoxication, it ſeldom fails to ſucceed a courſe of it. By a habit of drinking, the greateſt genius is often reduced to a mere idiot *.

‡ We may form some notion of the immense quantity of ardent spirits consumed in Great Britain from this circumstance, that in the city of Edinburgh and its environs, besides the great quantity of foreign spirits duly entered, and the still greater quantity which is supposed to be smuggled, it is computed that above two thousand private stills are constantly employed in preparing a liquor called *molasses*. The common people have got so universally into the habit of drinking this base spirit, that when a porter or labourer is seen reeling along the streets, they say, *he has got molassed*.

* It is amazing that our improvements in arts, learning, and politeness, have not put the barbarous custom of drinking to excess out of fashion. It is indeed less common in South Britain than it was formerly but it still prevails very much in the North, where this relic of barbarity is mistaken for hospitality. There no man is supposed to entertain his guests well who does not make them drunk. Forcing people to drink is certainly the greatest piece of rudeness that any

Intoxication is peculiarly hurtful to young perſons. It heats their blood, impairs their ſtrength, and obſtructs their growth; beſides, the frequent uſe of ſtrong liquors in the early part of life deſtroys any benefit that might ariſe from them afterwards. Thoſe who make a practice of drinking generous liquors when young, cannot expect to reap any benefit from them as a cordial in the decline of life.

Drunkenneſs is not only in itſelf a moſt abominable vice, but is an inducement to many others. There is hardly any crime ſo horrid that the drunkard will not perpetrate for the love of liquor. We have known mothers ſell their children's clothes, the food that they ſhould have eat, and afterwards even the infants themſelves, in order to purchaſe the accurſed draught.

The firſt propenſities to intemperance, both in eating and drinking, ought to be carefully checked. The ſtomach being diſtended occaſions a vacuum, which produces an habitual craving of the appetite; and the conſequences are heavineſs, debility, and diſeaſe.

In like manner frequent indulgence in drinking cauſes a depreſſion of the ſpirits only to be ſuſpended by having recourſe to a cup of the favorite liquor; and the drunkard conſiders the repetition of a debauch the beſt remedy for its conſequences next day. Mild and diluting liquors are repeated; and a ſucceſſion of hot ſtimulants increaſe the action of the heart and arteries; the lungs become inflamed, and a total relaxation of the ſyſtem enſues.

CHAP. VIII.

OF CLEANLINESS.

THE want of cleanlineſs is a fault which admits of no excuſe. Where water can be had for nothing

man can be guilty of. Manliness, complaisance, or mere good nature, may induce a man to take his glass, if urged to it, at a time when he might as well take poison. The custom of drinking to excess has long been out of fashion in France; and, as it begins to lose ground among the politer part of the English, we hope it will soon be banished from every part of this island.

it is ſurely in the power of every perſon to be clean. The continual diſcharge from our bodies by perſpiration, renders frequent change of apparel neceſſary. Changing apparel greatly promotes the ſecretion from the ſkin, ſo neceſſary for health. When that matter which ought to be carried off by perſpiration is either retained in the body, or re-abſorbed from dirty clothes, it muſt occaſion diſeaſes.

Diſeaſes of the ſkin are chiefly owing to want of cleanliness ‡. They may indeed be caught by infection, or brought on by poor living, unwholeſome food, &c. but they will ſeldom continue long where cleanlineſs prevails. To the ſame cauſe muſt we impute the various kinds of vermin which infeſt the human body, houſes, &c. Theſe may alway be baniſhed by cleanlineſs alone, and wherever they abound we may have reaſon to believe it is neglected.

One common cauſe of putrid and malignant fevers is the want of cleanlineſs. Theſe fevers commonly begin among the inhabitants of cloſe dirty houſes, who breathe unwholeſome air, take little exerciſe, and wear dirty clothes. There the infection is generally hatched, which often ſpreads far and wide to the deſtruction of many. Hence cleanlineſs may be conſidered as an object of public attention. It is not ſufficient that I be clean myſelf, while the want of it in my neighbour affects my health as well as his. If dirty people cannot be removed as a common nuiſance, they ought at leaſt to be avoided as infectious. All who regard their health ſhould keep at a diſtance even from their habitations.

In places where great numbers of people are collected, cleanlineſs becomes of the utmoſt importance. It is well known that infectious diſeaſes are communicated by tainted air. Every thing, therefore, which tends to pollute the air, or ſpread the infection, ought with the

‡ Mr. Pott in his surgical observations, mentions a disease which he calls the chimney sweepers' cancer, as it is almost peculiar to that unhappy set of people. This he attributes to neglect of cleanliness, and with great justice. I am convinced, if that part of the body which is the seat of this cruel disease were kept clean by frequent washing, it would never happen.

utmoſt care to be guarded againſt. For this reaſon, in great towns, no filth, of any kind, ſhould be permitted to lie upon the ſtreets. Nothing is more apt to convey infection than the excrements of the diſeaſed.

In many great towns the ſtreets are little better than dunghills, being frequently covered with aſhes, dung, and naſtineſs of every kind. Even ſlaughter houſes, or killing ſhambles, are often to be ſeen in the very centre of great towns. The putrid blood, excrements, &c. with which theſe places are generally covered, cannot fail to taint the air, and render it unwholeſome. How eaſily might this be prevented by active magiſtrates, who have it always in their power to make proper laws relative to things of this nature, and to enforce the obſervance of them.

We are ſorry to ſay, that the importance of general cleanlineſs does not ſeem to be ſufficiently underſtood by the magiſtrates of moſt great towns in Britain; though health, pleaſure, and delicacy, all conſpire to recommend an attention to it. Nothing can be more agreeable to the ſenſes, more to the honour of the inhabitants, or more conducive to their health, than a clean town; nor can any thing impreſs a ſtranger with a more reſpectful idea of any people than its oppoſite. Whatever pretenſions people may make to learning, politeneſs, or civilization, we will venture to affirm, that while they neglect cleanlineſs, they are in a ſtate of barbarity †.

The peaſants in moſt countries ſeem to hold cleanlineſs in a ſort of contempt. Were it not for the open ſituation of their houſes, they would often feel the bad effects of this diſpoſition. One ſeldom ſees a farm-

† In ancient Rome the greatest men did not think cleanliness an object unworthy of their attention. Pliny says the Cloacæ, or common sewers for the conveyance of filth and nastiness from the city, were the greatest of all the public works; and bestows higher encomiums upon Tarquinius, Agrippa, and others, who made and improved them, than on those who atchieved the greatest conquest.

How truly great does the emperor Trajan appear, when giving directions to Pliny his proconsul, concerning the making of a common sewer for the health and convenience of a conquered city?

houſe without a dunghill before the door, and frequently the cattle and their maſters lodge under the ſame roof. Peaſants are likewiſe extremely careleſs with reſpect to change of apparel, keeping their houſes, &c. clean. This is merely the effect of indolence and a dirty diſpoſition. Habit may indeed render it leſs diſagreeable to them, but no habit can ever make it ſalutary to wear dirty clothes, or breathe unwholeſome air.

As many articles of diet come through the hands of peaſants, every method ſhould be taken to encourage and promote habits of cleanlineſs among them. This, for example, might be done by giving a ſmall premium to the perſon who brings the cleaneſt and beſt article of any kind to market, as butter, cheeſe, &c. and by puniſhing ſeverely thoſe who bring it dirty. The ſame method ſhould be taken with butchers, bakers, brewers, and all who are employed in preparing the neceſſaries of life.

In camps the ſtricteſt regard ſhould be paid to cleanlineſs. By negligence in this manner, infectious diſeaſes are often ſpread amongſt a whole army; and frequently more die of theſe than by the ſword. The jews during their encampments in the wilderneſs, received particular inſtructions with reſpect to cleanlineſs‡. The rules enjoined them ought to be obſerved by all in the like ſituation. Indeed the whole ſyſtem of laws delivered to that people has a manifeſt tendency to promote cleanlineſs. Whoever conſiders the nature of their climate, the diſeaſes to which they were liable, and their dirty diſpoſition, will ſee the propriety of ſuch laws.

It is remarkable that, in moſt eaſtern countries, cleanlineſs makes a great part of their religion. The Mahometan as well as the Jewiſh religion enjoins various bathings, waſhings and, and purifications. No doubt theſe might be deſigned to repreſent inward purity;

‡ Thou ſhalt have a place alſo without the camp, whither thou ſhalt go forth abroad; and thou ſhalt have a paddle upon thy weapon; and it ſhall be when thou ſhalt eaſe thyſelf abroad, thou ſhall dig therewith, and ſhall turn back, and cover that which cometh from thee.—Deuter. chap. xxiii. ver. 12, 13.

but they were at the ſame time calculated for the preſervation of health. However whimſical theſe waſhings may appear to ſome, few things would tend more to prevent diſeaſes than a proper attention to many of them. Were every perſon, for example, after viſiting the ſick, handling a dead body, or touching any thing that might convey infection, to waſh before he went into company, or ſat down to meat, he would run leſs hazard either of catching the infection himſelf, or of communicating it to others.

Frequent waſhing not only removes the filth and ſordes which adhere to the ſkin, but likewiſe promotes the perſpiration, braces the body, and enlivens the ſpirits. How refreſhed, how cheerful, and agreeable does one feel on being ſhaved, waſhed, and ſhifted; eſpecially when theſe offices have been neglected longer than uſual!

The eaſtern cuſtom of waſhing the feet, though leſs neceſſary in this country, is nevertheleſs a very agreeable piece of cleanlineſs, and contributes greatly to the preſervation of health. The ſweat and dirt with which theſe parts are frequently covered, cannot fail to obſtruct the perſpiration. This piece of cleanlineſs would often prevent colds and fevers. Were people careful to bathe their feet and legs in lukewarm water at night, after being expoſed to cold or wet through the day, they would ſeldom experience the ill effects which often proceed from theſe cauſes.

A proper attention to cleanlineſs is no where more neceſſary than on ſhipboard. If epidemical diſtempers break out there, no one can be ſafe. The beſt way to prevent them is to take care that the whole company be cleanly in their clothes, bedding, &c. When infectious diſeaſes do break out, cleanlineſs is the moſt likely means to prevent their ſpreading; it is likewiſe neceſſary to prevent their returning afterwards, or being conveyed to other places. For this purpoſe, the clothes, bedding, &c. of the ſick ought to be carefully waſhed, and fumigated with brimſtone. Infection will lodge a long time

in dirty clothes, and afterward break out in the moſt terrible manner.

In places where great numbers of ſick people are collected together, as priſons, infirmaries, &c. cleanlineſs ought to be moſt religiouſly obſerved. The very ſmell in ſuch places is often ſufficient to make one ſick. Is is eaſy to imagine what effect that is likely to have upon the diſeaſed. In an hoſpital or infimary where cleanlineſs is neglected, a perſon in perfect health, has a greater chance to become ſick, than a ſick perſon has to get well.

Few things are more unaccountable than the neglect, or rather dread of cleanlineſs, which appears among thoſe who have the care of the ſick; they think it almoſt criminal to ſuffer any thing that is clean to come near a perſon in a fever, for example, and would rather allow him to wallow in all manner of filth, than change the leaſt bit of his linen. If cleanlineſs be neceſſary for perſons in health, it is certainly more ſo for the ſick. Many diſeaſes may be cured by cleanliness alone; moſt of them might be mitigated by it; and where it is neglected, the ſlighteſt diſorders are often changed into the moſt malignant. The ſame miſtaken care which prompted people to prevent the leaſt admiſſion of freſh air to the ſick, ſeems to have induced them to keep them dirty. Both theſe deſtructive prejudices will, we hope, be ſoon entirely eradicated.

Cleanlineſs is certainly agreeable to our nature. We cannot help approving it in others, even though we ſhould not practice it ourſelves. It ſooner attracts our regard than even finery itſelf, and often gains eſteem where that fails. It is an ornament to the higheſt as well as the loweſt ſtations and cannot be diſpenſed with in either. Few virtues are of more importance to ſociety than general cleanlineſs. It ought to be carefully cultivated every where; but in populous cities it ſhould be almoſt revered ‡.

‡ As it is impossible to be thoroughly clean without a sufficient quantity of water, we would earnestly recommend it to the magi-

Poverty often produces uncleanlineſs. The poor man while he complains of the want of things beyond his reach, neglects the moſt important objects of comfort, pure air and cleanlineſs. Theſe are in the power of every one, and the want of them in the moſt neceſſitous, can only be attributed to a moſt inexcuſable indolence, which inſtead of increaſing pity for their ſituation, will deter charity herſelf from the preſence of their impure perſons and filthy habitations.

CHAP. IX.

OF INFECTION.

MANY diſeaſes are infectious. Every perſon ought therefore, as far as he can, to avoid all communication with the diſeaſed. The common practice of viſiting the ſick, though often well meant, has many ill conſequences. Far be it from us to diſcourage any act of charity or benevolence, eſpecially towards thoſe in diſtreſs; but we cannot help blaming ſuch as endanger their own to their neighbours lives, by a miſtaken friendſhip or impertinent curioſity.

The houſes of the ſick, eſpecially in the country, are generally crowded from morning till night with idle viſitors. It is cuſtomary, in ſuch places, for ſervants and young people to wait upon the ſick by turns, and even to ſit up with them all night. It would be a miracle indeed ſhould ſuch always eſcape. Experience teaches us the danger of this conduct. People often catch fevers in this way, and communicate them to others, till at length they become epidemic.

ſtrates of great towns to be particularly attentive to this article. Moſt great towns in Britain are ſo ſituated as to be eaſily ſupplied with water; and thoſe perſons who will not make a proper uſe of it after it is brought to their hand, certainly deſerve to be ſeverely puniſhed. The ſtreets of great towns, where water can be had, ought to be waſhed every day. This is the only effectual method for keeping them thoroughly clean; and, upon trial, we are perſuaded it will be found the cheapeſt.

It would be thought highly improper for one who had not had the ſmall pox to wait upon a patient in that diſeaſe; yet many other fevers are almoſt as infectious as the ſmall pox, and not leſs fatal. Some imagine that fevers prove more fatal in villages than in great towns, for want of proper medical aſſiſtance. This may ſometimes be the caſe; but I am inclined to think it oftener proceeds from the cauſes above mentioned.

Were a plan to be laid down for communicating infection, it could not be done more effectually than by the common method of viſiting the ſick. Such viſitors not only endanger themſelves and their connexions, but likewiſe hurt the ſick. By crowding the houſe, they render the air unwholeſome, and by their private whiſpers and diſmal countenances, diſturb the imagination of the patient, and depreſs his ſpirits. Perſons who are ill, eſpecially in fevers, ought to be kept as quiet as poſſible. The ſight of ſtrange faces, and every thing that diſturbs the mind, hurts them.

The common practice in country places, of inviting great numbers of people to funerals, and crowding them into the ſame apartment where the corpſe lies, is another way of ſpreading infection. The infection does not always die with the patient. Every thing that comes into contact with the body while alive, receives the contagion; and ſome of them, as clothes, blankets, &c. will retain it for a long time. Perſons who die of infectious diſorders ought not to lie long unburied; and people ſhould keep as much as poſſible at a diſtance from them.

It would tend greatly to prevent the ſpreading of infectious diſeaſes, if thoſe in health were kept at a proper diſtance from the ſick. The Jewiſh Legiſlator, among many other wiſe inſtitutions for preſerving health, has been peculiarly attentive to the means of preventing infection or defilement, as it is called, either from a diſeaſed perſon or a dead body. In many caſes the diſeaſed were to be ſeparated from thoſe in health; and it was deemed a crime even to approach their habitations. If a perſon only touched a diſeaſed or dead bo-

dy, he was appointed to waſh himſelf in water, and to keep at a diſtance from ſociety.

Infectious diſeaſes are often communicated by clothes. It is extremely dangerous to wear apparel which has been worn by the diſeaſed, unleſs it has been well waſhed and fumigated, as infection may lodge a long time in it, and afterwards produce very tragical effects. This ſhows the danger of buying at random the clothes which have been worn by other people.

Infectious diſorders are frequently imported. Commerce, together with the riches of foreign climes, bring us alſo their diſeaſes. Theſe do often more than counterbalance all the advantages of that trade by means of which they are introduced. It is to be regretted, that ſo little care is commonly beſtowed, either to prevent the introduction or ſpreading of infectious maladies. Some attention indeed is generally paid to the plague; but other diſeaſes paſs unregarded *.

Infection is often ſpread through the cities, by jails, hoſpitals, &c. Theſe are frequently ſituated in the very middle of populous towns; and when infectious diſeaſes break out in them, it is impoſſible for the inhabitants to eſcape. Did magiſtrates pay any regard to the health of the people, this evil might be eaſily remedied.

Many are the cauſes which tend to diffuſe infection through populous cities. The whole atmoſphere of a large town is one contaminated maſs, abounding with various kinds of infection, and muſt be pernicious to

* Were the tenth part of the care taken to prevent the importation of diseases, that there is to prevent smuggling, it would be attended with many happy consequences. This might easily be done by appointing a physician at every considerable sea port, to inspect the ship's company, passengers, &c. before they came ashore, and, if any fever or other infectious disorder prevailed, to order the ship to perform a short quarantine, and to send the sick to some hospital or proper place to be cured. He might likewise order all the clothes, bedding, &c. which had been used by the sick during the voyage, to be either destroyed, or thoroughly cleansed by fumigation, &c. before any of it were sent ashore. A scheme of this kind, if properly conducted, would prevent many fevers, and other infectious diseases, from being brought by sailors into sea port towns, and by this means diffused all over the country.

health. The beſt advice that we can give to ſuch as are obliged to live in large cities, is to chuſe an open ſituation: to avoid narrow dirty, crowded ſtreets; to keep their own houſe and offices clean; and to be as much abroad in the open air as their time will permit.

It would tend greatly to prevent the ſpreading of infectious diſeaſes, were proper nurſes every where employed to take care of the ſick. This might often ſave a family, or even a whole town, from being infected by one perſon. We do not mean that people ſhould abandon their friends or relations in diſtreſs, but only to put them on their guard againſt being too much in company with thoſe who are inflicted with diſeaſes of an infectious nature.

Such as wait upon the ſick in infectious diſeaſes, run very great hazard. They ſhould ſtuff their noſes with tobacco, or ſome other ſtrong ſmelling herb, as rue, tanſy, or the like. They ought likewiſe to keep the patient very clean, to ſprinkle the room where he lies with vinegar or other ſtrong acids, frequently to admit a ſtream of freſh air into it, and to avoid the ſmell of his breath as much as they can. They ought never to go into company without having changed their clothes and waſhed their hands; otherwiſe if the diſeaſe be infectious, they will in all probability carry the contagion along with them †.

However trifling it may appear to inconſiderate perſons, we will venture to affirm, that a due attention to thoſe things which tend to diffuſe infection would be of great importance in preventing diſeaſes. As moſt diſ-

† There is reason to believe that infection is often conveyed from one place to another by the the carelessness of the faculty themselves. Many physicians affect a familiar way of sitting upon the patient's bedside, and holding his arm for a considerable time. If the patient has the small pox, or any other infectious disease, there is no doubt but the doctor's hands, clothes, &c. will carry away some of the infection; and if he goes directly to visit another patient without washing hands, changing his clothes, or being exposed to the open air, which is not seldom the case, is it any wonder that he should carry the disease along with him? Physicians not only endangers others, but also themselves, by this practice. And indeed they sometimes suffer by their want of care.

aſes are in ſome degree infectious, no one ſhould con-
inue long with the ſick, except the neceſſary attend-
nts. I mean not, however, by this caution, to defer
hoſe whoſe duty or office leads them to wait upon the
ick, from ſuch a laudable and neceſſary employment.

Many things are in the power of the magiſtrate which
vould tend to prevent the ſpreading of infection; as the
romoting of public cleanlineſs, removing jails, hoſpi-
als, burying grounds, and other places where infection
nay be generated, at a proper diſtance from great
owns †; widening the ſtreet; pulling down uſeleſs
valls, and taking all methods to procure a free circu-
ation of air through every part of the town, &c. Pub-
ic hoſpitals, or proper places of reception for the ſick,
rovided they were kept clean, well ventilated, and
laced in an open ſituation, would likewiſe tend to pre-
ent the ſpreading of infection. Such places of recep-
ion would prevent the poor, when ſick, from being
iſited by their idle or officious neighbours. They would
ikewiſe render it unneceſſary for ſick ſervants to be
ept in their maſters' houſes. Maſters had better pay
or having their ſervants taken care of in an hoſpital,
han run the hazard of having an infectious diſeaſe dif-
uſed among a numerous family. Sick ſervants and poor
eople, when placed in hoſpitals, are not only leſs apt
o diffuſe infection among their neighbours, but have
ikewiſe the advantage of being well attended.

We are not, however, to learn, that hoſpitals, inſtead
f preventing infection, may become the means of dif-
uſing it. When they are placed in the middle of great
owns; when numbers of patients are crowded together
n ſmall apartments; where there is a conſtant communi-
ation kept up between the citizens and the patients;
nd when cleanlineſs and ventilation are neglected, they
ecome neſts for hatching diſeaſes, and every one who
goes into them not only runs a riſk of receiving
nfection himſelf, but likewiſe of communicating it to

† The ancients would not ſuffer even the temples of their gods, where the ſick reſorted, to be built within the walls of a city.

others. This, however, is not the fault of the hoſpitals, but of thoſe who have the management of them. It were to be wiſhed, that they were both more numerous, and upon a more reſpectable footing, as that would induce people to go into them with leſs reluctance. This is the more to be deſired, becauſe moſt of the putrid fevers and other infectious diſorders break out among the poor, and are by them communicated to the better ſort. Were proper attention paid to the firſt appearances of ſuch diſorders, and the patients early conveyed to an hoſpital, we ſhould ſeldom ſee a putrid fever, which is almoſt as infectious as the plague, become epidemic.

From the preceding obſervations it may be inferred, that the frequent and unneceſſary viſits made, eſpecially by country people, to their friends and neighbours when in fevers, may be, and frequently are, attended with the worſt and moſt fatal conſequences. The ſick perſon is thus incommoded, and the ill judged officiouſneſs of the viſitors are often attended with the worſt conſequences. The infection is carried into other families, and ſpread far and wide. Here in caſes of epidemical diſeaſes the ſervants of a family ſhould never be ſuffered to act as attendants on the patient, but proper nurſes be hired on purpoſe.

CHAP. X.

OF THE PASSIONS.

THE paſſions have great influence both in the cauſe and cure of diſeaſes. How the mind affects the body, will in all probability ever remain a ſecret. It is ſufficient for us to know, that there is eſtabliſhed a reciprocal influence between the mental and corporeal parts; and that whatever injures the one, diſorders the other.

Of Anger.

The paſſion of anger ruffles the mind, diſtorts the

untenance, hurries on the circulation of the blood, d disorders the whole vital and animal functions. It ten occasions fevers, and other acute diseases; and metimes even sudden death. This passion is peculi- ly hurtful to the delicate and those of weak nerves. have known such persons frequently lose their lives y a violent fit of anger, and would advise them to ard against the excess of this passion with the utmost re.

It is not indeed always in our power to prevent being gry; but we may surely avoid harbouring resentment our breast. Resentment preys upon the mind, and casions the most obstinate chronical disorders, which radually wastes the constitution. Nothing shews true reatness of mind more than to forgive injuries; it pro- otes the peace of society, and greatly conduces to our vn ease, health, and felicity.

Such as value health should avoid violent gusts of an- r, as they would the most deadly poison. Neither ght they to indulge resentment, but to endeavour at l times to keep their minds calm and serene. Nothing nds so much to the health of the body as a constant anquility of mind.

Of Fear.

The influence of fear, both in occasioning and ag- ravating diseases, is very great. No man ought to be amed for a decent concern about life; but too great a sire to preserve it, is often the cause of losing it. Fear d anxiety, by depressing the spirits, not only dispose to diseases, but often render those diseases fatal which undaunted mind would overcome.

Sudden fear has generally violent effects. Epileptic s and other convulsive disorders, are often occasioned it. Hence the danger of that practice, so common ong young people, of frightening one another. Many ve lost their lives, and others have been rendered serable, by frolics of this kind. It is dangerous to mper with the human passions. The mind may easily thrown into such disorder, as never again to act with gularity.

But the gradual effects of fear prove moſt hurtful. The conſtant dread of ſome future evil, by dwelling upon the mind, often occaſions the very evil itſelf. Hence it comes to paſs that ſo many die of thoſe very diſeaſes of which they long had a dread, or which had been impreſſed on their minds by ſome accident, or fooliſh prediction. This, for example, is often the caſe with women in child-bed. Many of thoſe who die in that ſituation, are impreſſed with the notion of their death, a long time before it happens; and there is reaſon to believe that this impreſſion is often the cauſe of it.

The methods taken to impreſs the minds of women with the apprehenſions of the great pain and peril of child-birth, are very hurtful. Few women die in labour though many loſe their lives after it; which may be thus accounted for. A woman after delivery, finding herſelf weak and exhauſted, immediately apprehends ſhe is in danger; but this fear ſeldom fails to obſtruct the neceſſary evacuations, upon which her recovery depends. Thus the ſex often fall a ſacrifice to their own imaginations, when there would be no danger, did they apprehend none.

It ſeldom happens, that two or three women in a great town die in child-bed, but their death is followed by many others. Every woman of their acquaintance who is with child dreads the ſame fate, and the diſeaſe becomes epidemical, by the mere force of imagination. This ſhould induce pregnant women to deſpiſe fear, and by all means to avoid thoſe tattling goſſips who are continually buzzing in their ears the misfortunes of others. Every thing that may in the leaſt alarm a pregnant or child-bed woman, ought with the greateſt care to be guarded againſt.

Many women have loſt their lives in child-bed by the old ſuperſtitious cuſtom, ſtill kept up in moſt parts of Britain, of tolling the pariſh bell for every perſon that dies. People who think themſelves in danger, are very inquiſitive; and if they come to know that the bell tolled for one who died in the ſame ſituation with themſelves, what muſt be the conſequence? At any rate they are ap-

to ſuppoſe that this is the caſe, and it will often be found a very difficult matter to perſuade them of the contrary.

But this cuſtom is not pernicious to child bed women only. It is hurtful in many other caſes. When low fevers, in which it is difficult to ſupport the patient's ſpirits, prevail, what muſt be the effect of a funeral p.al ſounding five or ſix times a day in his ears? No doubt his imagination will ſuggeſt that others died of the ſame diſeaſe under which he labours. This apprehenſion will have a greater tendency to depreſs his ſpirits, than all the cordials of which medicine can boaſt will have to raiſe them.

If this uſeleſs piece of ceremony cannot be aboliſhed, we ought to keep the ſick as much from hearing it as poſſible, and from every other thing that may tend to alarm them. So far, however, is this from being generally attended to, that many make it their buſineſs to viſit the ſick, on purpoſe to whiſper diſmal ſtories in their ears. Such may paſs for ſympathiſing friends, but they ought rather to be conſidered as enemies. All who wiſh well to the ſick, ought to keep ſuch perſons at the greateſt diſtance from them.

A cuſtom has long prevailed among phyſicians, of prognoſticating, as they call it, the patient's fate, or foretelling the iſſue of the diſeaſe. Vanity, no doubt, introduced this practice, and ſtill ſupports it, in ſpite of common ſenſe, and the ſafety of mankind. I have known a phyſician barbarous enough to boaſt, that he pronounced more *ſentences* than all his Majeſty's judges. Would to God that ſuch ſentences were not often equally fatal? It may indeed be alledged, that the doctor does not declare his opinion before the patient. So much the worſe. A ſenſible patient had b.tter hear what the doctor ſays, than learn it from the diſconſolate looks, the watery eyes, and the broken whiſpers, of thoſe about him. It ſeldom happens, when the doctor gives an unfavourable opinion, that it can be concealed from the patient. The very embarraſſment which the friends

and attendants ſhew in diſguiſing what he has ſaid, is generally ſufficient to diſcover the truth.

Kind heaven has, for the wiſeſt ends, concealed from mortals their fate; and we do not ſee what right any man has to announce the death of another, eſpecially if ſuch a declaration has a chance to kill him. Mankind are indeed very fond of prying into future events, and ſeldom fail to ſolicit the phyſician for his opinion. A doubtful anſwer, however, or one that may tend rather to encourage the hopes of the ſick, is ſurely the moſt ſafe. This conduct could neither hurt the patient nor the phyſician. Nothing tends more to deſtroy the credit of phyſic, than thoſe bold prognoſticators, who, by the by, are generally the moſt ignorant of the faculty. The miſtakes which daily happen in this way are ſo many ſtanding proofs of human vanity, and the weakneſs of ſcience.

We readily admit, that there are caſes where the phyſician ought to give intimation of the patient's danger to ſome of his near connexions; though even this ought always to be done with the greateſt caution; but it never can be neceſſary in any caſe that the whole town and country ſhould know, immediately after the doctor has made his firſt viſit, *that he has no hopes of his patient's recovery.* Perſons whoſe impertinent curioſity leads them to queſtion the phyſician with regard to the fate of his patient, certainly deſerve no other than an evaſive anſwer.

The vanity of foretelling the fate of the ſick is not peculiar to the faculty. Others follow their example, and thoſe who think themſelves wiſer than their neighbours often do much hurt in this way. Humanity ſurely calls upon every one to comfort the ſick, and not add to their affliction by alarming their fears. A friend, or even a phyſician, may often do more good by a mild and ſympathiſing behaviour than by medicine, and ſhould never neglect to adminiſter that greateſt of all cordials, HOPE.

Of Grief.

Grief is the moſt deſtructive of all the paſſions. It

effects are permanent: and when it ſinks deep into the mind, it generally proves fatal. Anger and fear being of a more violent nature, ſeldom laſt long; but grief often changes into a fixed melancholy, which preys upon the ſpirits, and waſtes the conſtitution. This paſſion ought not to be indulged. It may generally be conquered at the beginning; but when it has gained ſtrength, all attemps to remove it are vain.

No perſon can prevent misfortunes in life; but it ſhews true greatneſs of mind to bear them with ſerenity. Many perſons make a merit of indulging grief, and when misfortunes happen, they obſtinately refuſe all conſolation, till the mind, overwhelmed with melancholy, ſinks under the load. Such conduct is not only deſtructive to health, but inconſiſtent with reaſon, religion, and common ſenſe.

Change of ideas is as neceſſary for health as change of poſture. When the mind dwells long upon one ſubject, eſpecially of a diſagreeable nature, it hurts the whole functions of the body. Hence grief indulged ſpoils the digeſtion and deſtroys the appetite; by which means the ſpirits are depreſſed, the nerves relaxed, the bowels inflated with wind, and the humours, for want of freſh ſupplies of chyle, vitiated. Thus, many an excellent conſtitution has been ruined by a family misfortune, or any thing that occaſions exceſſive grief.

It is utterly impoſſible that any perſon of a dejected mind ſhould enjoy health. Life may indeed be dragged out for a few years; but whoever would live to a good old age, muſt be good-humoured and cheerful. This indeed is not altogether in our own power; yet our temper of mind, as well as our actions, depend greatly upon ourſelves. We can either aſſociate with cheerful or melancholy companions, mingle in the amuſements and offices of life, or ſit ſtill and brood over our calamities as we chooſe. Theſe, and many ſuch things, are certainly in our power, and from theſe the mind generally takes its caſt.

The variety of ſcenes which preſent themſelves to the ſenſes, were certainly deſigned to prevent our at-

tention from being too long fixed upon any one object. Nature abounds with variety, and the mind, unleſs fixed down by habit, delights in contemplating new objects. This at once points out the method of relieving the mind in diſtreſs. Turn the attention frequently to new objects. Examine them for ſome time. When the mind begins to recoil, ſhift the ſcene. By this means a conſtant ſucceſſion of new ideas may be kept up till the diſagreeable ones entirely diſappear. Thus travelling, the ſtudy of any art or ſcience, reading, or writing on ſuch ſubjects as deeply engage the attention, will ſooner expel grief than the moſt ſprightly amuſements.

It has already been obſerved, that the body cannot be healthy unleſs it be exerciſed; neither can the mind. Indolence nourifhes grief. When the mind has nothing elſe to think of but calamities, no wonder that it dwells there. Few people who purſue buſineſs with attention are hurt by grief. Inſtead therefore of abſtracting ourſelves from the world or buſineſs when misfortunes happen, we ought to engage in it with more than uſual attention, to diſcharge with double diligence the functions of our ſtation, and to mix with friends of a cheerful and ſocial temper.

Innocent amuſements are by no means to be neglected. Theſe, by leading the mind inſenſibly to the contemplation of agreeable objects, help to diſpel the gloom which misfortunes caſt over it. They make time ſeem leſs tedious, and have many other happy effects.

Some perſons, when overwhelmed with grief, betake themſelves to drinking. This is making the cure worſe than the diſeaſe. It ſeldom fails to end in the ruin of fortune, character, and conſtitution.

Of Love.

Love is perhaps the ſtrongeſt of all the paſſions. At leaſt, when it becomes violent, it is leſs ſubject to the control either of the underſtanding or will, than any of the reſt. Fear, anger, and ſeveral other paſſions, are neceſſary for the preſervation of the individual, but

ve is neceſſary for the continuation of the ſpecies ſelf; it was therefore proper that this paſſion ſhould : deeply rooted in the human breaſt.

Though love be a ſtrong paſſion, it is ſeldom ſo rapid its progreſs as ſeveral of the others. Few perſons ll deſperately in love all at once. We would therefore viſe every one before he tampers with this paſſion, to nſider well the probability of his being able to obtain e object of his love. When that is not likely, he ould avoid every occaſion of increaſing it. He ought mediately to fly the company of the beloved object; apply his mind attentively to buſineſs, or ſtudy; to take ery kind of amuſement; and above all, to endeavour, poſſible, to find another object which may engage his ections, and which it may be in his power to obtain. There is no paſſion with which people are ſo ready to nper, as love, although none is more dangerous. Some en make love for amuſement, others from mere vanity, on purpoſe to ſhew their conſequence with the fair. his is perhaps the greateſt piece of cruelty that any e can be guilty of. What we eagerly wiſh for, we ſily credit. Hence the too credulous fair are often rayed into a ſituation which is truly deplorable, be- e they are able to diſcover that the pretended lover s only in jeſt. But there is no jeſting with this paſ- n. When love has got to a certain height, it admits no other cure but the poſſeſſion of its object, which this caſe ought always, if possible, to be obtained †.

Of Religious Melancholy.

Many perſons of a religious turn of mind behave as

† The conduct of parents with regard to the diſpoſal of their chil- n in marriage is often very blameable. An advantageous match e conſtant aim of parents; while their children often ſuffer a real trydom between their inclinations and duty. The firſt thing ch parents ought to conſult in diſpoſing their children in marriage rtainly their inclinations. Were due regard always paid to theſe would be fewer unhappy couples, and parents would not have ten cauſe to repent the ſeverity of their conduct, after a ruined ſtitution, a loſt character, or a diſtracted mind, has ſhewn them miſtake.

if they thought it a crime to be cheerful. They imagine the whole of religion conſiſts in certain mortifications, or denying themſelves the ſmalleſt indulgence, even of the moſt innocent amuſements. A perpetual gloom hangs over their countenances, while the deepeſt melancholy preys upon their minds. At length the faireſt proſpects vaniſh, every thing puts on a diſmal appearance, and thoſe very objects which ought to give delight, afford nothing but diſguſt. Life itſelf becomes a burden, and the unhappy wretch, perſuaded that no evil can equal what he feels, often puts an end to his own miſerable exiſtence.

It is great pity that ever religion ſhould be ſo far perverted as to become the cauſe of thoſe very evils which it was deſigned to cure. Nothing can be better calculated than true religion, to raiſe and ſupport the mind of its votaries under every affliction that can befal them. It teaches them that even the ſufferings of this life are preparatory to the happineſs of the next, and that all who perſiſt in a courſe of virtue ſhall at length arrive at complete felicity.

Perſons whoſe buſineſs it is to recommend religion to others, ſhould beware of dwelling too much on gloomy ſubjects. That peace and tranquility of mind, which true religion is calculated to inſpire, is a more powerful argument in its favour, than all the terrors that can be uttered. Terror may indeed deter men from outward acts of wickedneſs, but can never inspire them with that love of God, and real goodneſs of heart, in which alone true religion conſiſts.

To conclude; the beſt way to counteract the violence of any paſſion, is to keep the mind cloſely engaged in ſome uſeful purſuit.

Literary men under the preſſure of melancholy or other corroding paſſion, will find the beſt remedy in applying to compoſition. A gentleman devoted to the Muſes, inconſolable for the loſs of a beloved wife, was cured of his grief by anxiety to expreſs in the moſt pathetic terms, the pregnancy of his ſorrow in an elegy to her memory. In ſhort, an earneſt application of the

mind to any intereſting purſuit, will moſt effectually divert the attention, and moderate paſſions which reason cannot control.

CHAP. XI.

OF THE COMMON EVACUATIONS.

THE principal evacuations from the human body, are thoſe by *ſtool*, *urine*, and *inſenſible perſpiration*. one of theſe can be long obſtructed without impairing e heath. When that which ought to be thrown out the body is too long retained, it not only occaſions *plethora*, or too great fulneſs of the veſſels, but acires qualities, which are hurtful to the health, as rimony, putreſcence, &c.

Of the Evacuation by Stool.

Few things conduce more to health than keeping e body regular. When the *fæces* lie too long in the wels, they vitiate the humours; and when they are o ſoon diſcharged, the body is not ſufficiently uriſhed. A medium is therefore to be deſired, which n only be obtained by regularity in diet, ſleep, and ercife. Whenever the body is not regular, there is ſon to ſuſpect a fault in one or other of theſe.

Perſons who eat and drink at irregular hours, and o eat various kinds of food, and drink of ſeveral difent liquors at every meal, have no reaſon to expect ner that their digeſtion will be good, or their diſrges regular. Irregularity in eating and drinking urbs every part of the animal œconomy, and never to occaſion diſeaſes. Either too much or too little d will have this effect. The former indeed generally aſions looſeneſs, and the latter coſtiveneſs; but both e a tendency to hurt the health.

t would be difficult to aſcertain the exact number of ds which may be conſiſtent with health, as theſe difin the different periods of life, in different conſtitus, and even in the ſame conſtitution under a differ-

ent regimen of diet, exercise, &c. It is, however, generally allowed, that one stool a day is sufficient for an adult, and that less is hurtful. But this, like most general rules, admits of many exceptions. I have known persons in perfect health who did not go to stool above once a week. Such a degree of costiveness, however, is not safe; though the person who labours under it may for some time enjoy tolerable health, yet at length it may occasion diseases.

One method of procuring a stool every day, is to rise betimes, and go abroad in the open air. Not only the posture in bed is unfavourable to regular stools, but also the warmth. This, by promoting the perspiration lessens all the other discharges.

The method recommended for this purpose by Mr. Locke, is likewise very proper, *viz*, *to solicit nature, by going regular to stool every morning whether one has a call or not.* Habits of this kind may be acquired, which will in time become natural.

Persons who have frequent recourse to medicines for preventing costiveness, seldom fail to ruin their constitution. Purging medicines frequently repeated weaken the bowels, hurt the digestion, and every dose makes way for another, till at length they become as necessary as daily bread. Those who are troubled with costiveness ought rather, if possible, to remove it by diet that drugs. They should likewise go thinly clothed, and avoid every thing of an astringent or of an heating nature. The diet and other regimen necessary in this case will be found under the article of Costiveness, where this state of the bowels is treated as a disease.

Such persons as are troubled with an habitual looseness, ought likewise to suit their diet to the nature of their complaint. They should use food which braces and strengthens the bowels, and which is rather of an astringent quality, as wheat bread made of the finest flour, cheese, eggs, rice boiled in milk, &c. Their drink should be red port, claret, brandy and water, in which toasted bread has been boiled, and such like.

As an habitual looseness is often owing to an obstructed

perſpiration, perſons affected with it ought to keep their feet warm, to wear flannel next their ſkin, and take every other method to promote the perſpiration. Further directions with regard to the treatment of this complaint will be found under the article Looſeneſs.

Of Urine.

So many things tend to change both the quantity and appearances of the urine, that it is very difficult to lay down any determined rules for judging of either *. Dr. Cheyne ſays, the urine ought to be equal to three fourths of the liquid part of our aliment. But ſuppoſe any one were to take the trouble of meaſuring both, he would find that every thing which altered the degree of perſpiration, would alter this proportion, and likewiſe that different kinds of aliment would afford very different quantities of urine. Though for theſe, and other reaſons, no rule can be given for judging of the preciſe quantity of urine which ought to be diſcharged, yet a perſon of common ſenſe will ſeldom be at a loſs to know when it is in either extreme.

As a free diſcharge of urine not only prevents, but actually cures many diſeaſes, it ought by all means to be promoted; and every thing that may obſtruct it, ſhould

* It has long been an obſervation among phyſicians, that the appearances of the urine are very uncertain, and very little to be depended on. No one will be ſurpriſed at this, who conſiders how many ways it may be affected, and conſequently have its appearance altered. The paſſions, the ſtate of the atmoſphere, the quantity and quality of the food, the exerciſe, the clothing, the ſtate of the other evacuations, and numberleſs other cauſes, are ſufficient to induce a change either in the quantity or appearance of the urine. Any one who attends to this will be aſtoniſhed at the impudence of thoſe daring quacks, who pretend to find out diſeaſes and preſcribe to patients, from the bare inſpection of their urine. Theſe impoſtors, however, are very common all over Britain, and, by the amazing credulity of the populace, many of them amaſs conſiderable fortunes. Of all the medical prejudices which prevail in this country, that in favour of urine doctors is the ſtrongeſt. The common people have ſtill an unlimited faith in their ſkill, although it has been demonſtrated that no one of them is able to diſtinguiſh the urine of a horſe, or any other animal, from that of a man.

be carefully avoided. Both the ſecretion and diſcharge of urine are leſſened by a ſedentary life, ſleeping on beds that are too ſoft and warm, food of a dry or heating quality, liquors which are aſtringent and heating, as red port, claret and ſuch like. Thoſe who have reaſon to ſuſpect that their urine is in too ſmall quantity, or who have any ſymptoms of the gravel, ought not only to avoid theſe things, but whatever elſe they find has a tendency to leſſen the quantity of the urine.

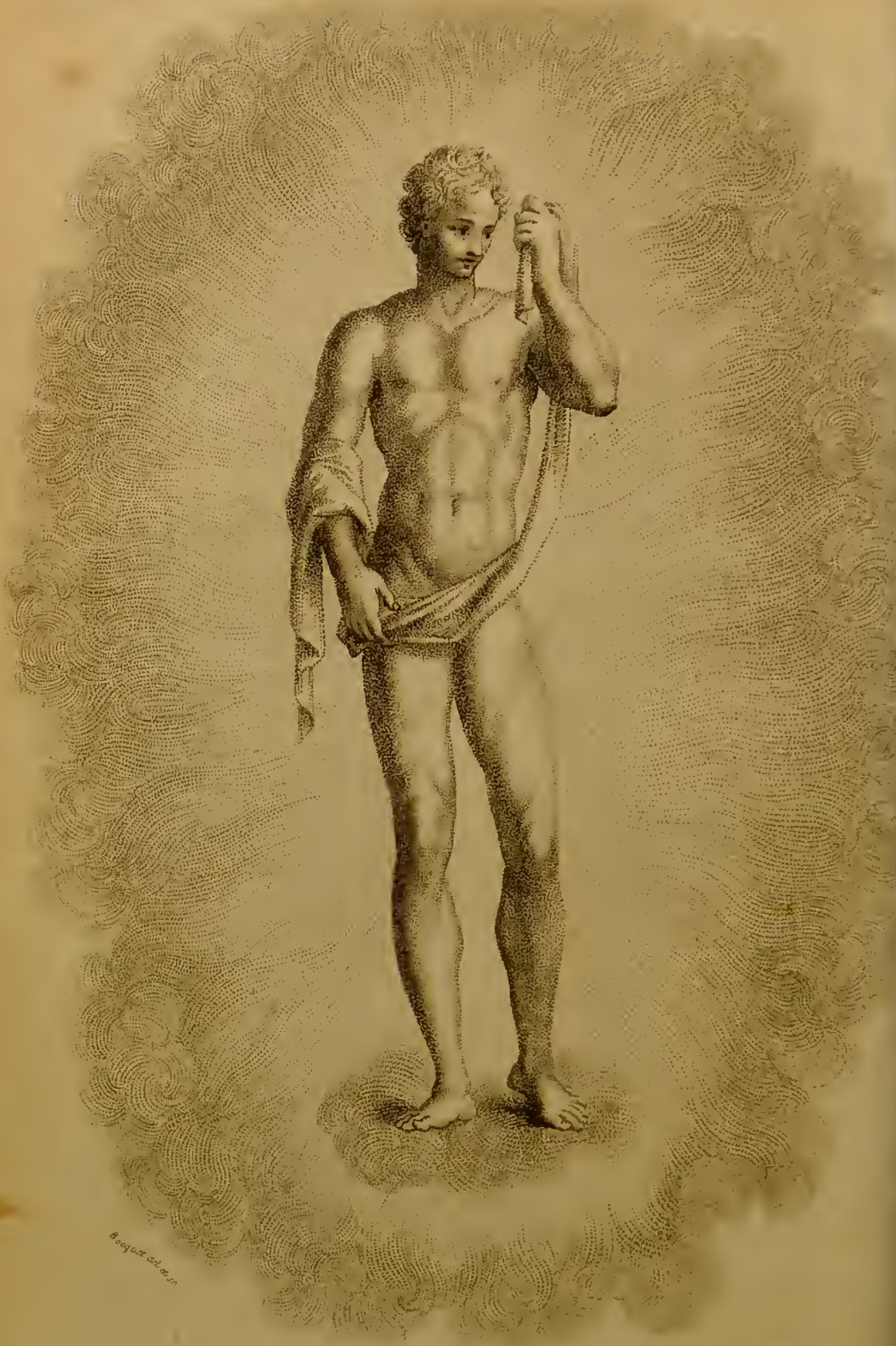
When the urine is too long retained, it is not only reſorbed, or taken up again into the maſs of fluids, but by ſtagnating in the bladder it becomes thicker, the more watery parts flying off firſt, and the more groſs and earthy remaining behind. By the conſtant tendency which theſe have to concrete, the formation of ſtones and gravel in the bladder is promoted. Hence it comes to paſs that indolent and ſedentary people are much more liable to theſe diſeaſes, than perſons of a more active life.

Many perſons have loſt their lives, and others have brought on very tedious and even incurable diſorders by retaining their urine too long, from a falſe delicacy. When the bladder has been over diſtended, it often loſes its power of action altogether, or becomes paralytic, by which means it is rendered unable either to retain the urine, or expel it properly. The calls of nature ought never to be poſtponed. Delicacy is doubtleſs a virtue, but that can never be reckoned true delicacy, which induces any one to riſk his health, or hazard his life.

But the urine may be in too great as well as too ſmall a quantity. This may be occaſioned by drinking large quantities of weak watery liquors, by the exceſſive uſe of alkaline ſalts, or any thing that ſtimulates the kidneys, dilutes the blood, &c. This diſorder very ſoon weakens the body, and induces a conſumption. It is difficult to cure, but may be mitigated by ſtrengthening diet and aſtringent medicines, ſuch as are recommended under the article Diabetes, or exceſſive diſcharge of urine.

Of the Perſpiration.

Inſenſible perſpiration is generally reckoned the



Bocquet del. et sc.

Insensible Perspiration of the Human Body.

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greateſt of all the diſcharges from the human body. It is of ſo great importance to health, that few diſeaſes attack us while it goes properly on; but when it is obſtructed the whole frame is ſoon diſordered. This diſcharge, however, being leſs perceptible than any of the reſt, is conſequently leſs attended to. Hence it is, that acute fever, rheumatiſms, agues, &c. often proceed from obſtructed perſpiration, before we are aware of its having taken place.

On examining patients, we find moſt of them impute their diſeaſes either to violent colds which they had caught, or to ſlight ones which had been neglected. For this reaſon, inſtead of a critical inquiry into the nature of the perſpiration, its difference in different ſeaſons, climates, conſtitutions, &c. we ſhall endeavour to point out the cauſes which moſt commonly obſtruct it, and to ſhew how far they may be either avoided, or have their influence conteracted by timely care. The want of due attention to theſe, coſts Britain annually ſome thouſand of uſeful lives.

Changes in the Atmoſphere.

One of the moſt common cauſes of obſtructed perſpiration, or catching cold, in this country, is the changeableneſs of the weather, or ſtate of the atmoſphere. There is no place where ſuch changes happen more frequently than in Great Britain. With us the degrees of heat and cold are not only very different in the different ſeaſons of the year, but often change almoſt from one extreme to another in a few days, and ſometimes even in the courſe of one day. That ſuch changes muſt affect the ſtate of the perſpiration is obvious to every one*.

* I never knew a more remarkable inſtance of the uncertainty of the weather in this country, than happened while I was writing theſe notes. This morning, Auguſt 14th, 1783, the thermometer in the ſhade was down at fifty three degrees, and a very few days ago it ſtood above eighty. No one who reflects on ſuch great and ſudden change in the atmoſphere, will be ſurpriſed to find colds, coughs, rheums, with other affections of the breaſt and bowels, ſo common in this country.

The beſt method of fortifying the body againſt the changes of the weather, is to be abroad every day. Thoſe who keep moſt within doors are moſt liable to catch cold. Such perſons generally render themſelves ſo delicate as to feel even the ſlighteſt changes in the atmoſphere, and by their pains, coughs, and oppreſſions of the breaſt, &c. they become a kind of living barometers.

Wet Clothes.

Wet clothes not only by their coldneſs obſtruct the perſpiration, but their moiſture, by being abſorbed, or taken up into the body, greatly increaſes the danger. The moſt robuſt conſtitution is not proof againſt the danger ariſing from wet clothes; they daily occaſion fevers, rheumatiſms, and other fatal diſorders, even in the young and healthy.

It is impoſſible for people who go frequently abroad to avoid ſometimes being wet. But the danger might generally be leſſened, if not wholly prevented, by changing their clothes ſoon; when this cannot be done, they ſhould keep in motion till they be dry. So far are many from taking this precaution, that they often ſit or lie down in the fields with their clothes wet, and frequently ſleep even whole nights in this condition. The frequent inſtances which we have of the fatal effects of this conduct, ought certainly to deter all from being guilty of it.

Wet Feet.

Even wet feet often occaſion fatal diſeaſes. The cholic, inflammations of the breaſt and of the bowels, the iliac paſſion, cholera morbus, &c. are often occaſioned by wet feet. Habit will, no doubt, render this leſs dangerous; but it ought, as far as poſſible, to be avoided. The delicate, and thoſe who have not been accuſtomed to have their clothes or feet wet, ſhould be peculiarly careful in this reſpect.

Night Air.

The perſpiration is often obſtructed by night air;

even in ſummer, this ought to be avoided. The dews which fall plentifully after the hotteſt day, make the night more dangerous than when the weather is cool. Hence, in warm countries, the evening dews are more hurtful than where the climate is more temperate.

Is is very agreeable after a warm day to be abroad in a cool evening; but this is a pleaſure to be avoided by all who value their health. The effects of evening dews are gradual indeed, and almoſt impereeptible; but they are not the leſs to be dreaded; we would therefore adviſe travellers, labourers, and all who are much heated by day, carefully to avoid them When the perſpiration has been great, theſe become dangerous in proportion. By not attending to this, in flat marſhy countries, where the exhalation and dews are copious, labourers are often ſeized with intermitting fevers, quinſies, and other dangerous diſeaſes.

Damp Beds.

Beds become damp, either from their not being uſed, ſtanding in damp houſes, or in rooms without fire. Nothing is more to be dreaded by travellers than damp beds, which are very common in all places where fuel is ſcarce. When a traveller, cold and wet, arrives at an inn, he may by means of a good fire, warm diluting liquor, and a dry bed, have the perſpiration reſtored; but if he be put into a cold room, and laid in a damp bed, it will be more obſtructed, and the worſt conſequences will enſue. Travellers ſhould avoid inns which are noted for damp beds, as they would a houſe infected with the plague, as no man, however robuſt, is proof againſt the danger ariſing from them.

But inns are not the only places where damp beds are to be met with. Beds kept in private families for the reception of ſtrangers are often equally dangerous. All kinds of linen and bedding, when not frequently uſed, become damp. How then is it poſſible that beds, which are not ſlept in above two or three times a year ſhould be ſafe? Nothing is more common than to hear people complain of having caught cold by changing

their bed. The reaſon is obvious; were they careful never to ſleep in a bed but what was frequently uſed, they would ſeldom find any ill conſequences from a change.

Nothing is more to be dreaded by a delicate perſon when on a viſit, than being laid in a bed which is kept on purpoſe for ſtrangers. That ill judged piece of complaiſance becomes a real injury. All the bad conſequences from this quarter might eaſily be prevented in private families, by cauſing their ſervants to ſleep in the ſpare beds, and reſign them to ſtrangers when they come. In inns, where the beds are uſed almoſt every night, nothing elſe is neceſſary than to keep the rooms well ſeaſoned by frequent fires, and the linen dry.

That baneful cuſtom, ſaid to be practiced in many inns, of damping ſheets, and preſſing them, in order to ſave waſhing, and afterwards laying them on the beds, ought, when diſcovered, to be puniſhed with the utmoſt ſeverity. It is really a ſpecies of murder, and will often prove as fatal as poiſon or gun ſhot. Indeed no linen, eſpecially if it has been waſhed in winter, ought to be uſed till it has been expoſed for ſome time to the fire; nor is this operation leſs neceſſary for linen waſhed in ſummer, provided it has lain by for any length of time. This caution is the more needful, as gentlemen are often exceedingly attentive to what they eat or drink at an inn, yet pay no regard to a circumſtance of much more importance ‡.

Damp Houſes.

Damp houſes frequently produce the like ill conſequences; for this reaſon thoſe who build ſhould be careful to chooſe a dry ſituation. A houſe which ſtands on a damp marſhy ſoil or deep clay, will never be thoroughly dry. All houſes, unleſs where the ground is exceedingly dry, ſhould have the firſt floor a little raiſed.

‡ If a perſon ſuſpects that his bed is damp, the ſimple precaution of taking off the ſheets and lying in the blankets, with all, or moſt of his clothes on, will prevent all the danger. I have practiced this for many years, and never have been hurt by damp beds, though no conſtitution, without care, is proof againſt their baneful influence.

Servants and others, who are obliged to live in cellars and ſunk ſtories, ſeldom continue long in health: maſters ought ſurely to pay ſome regard to the health of their ſervants, as well as to their own.

Nothing is more common than for people, merely to avoid ſome trifling inconveniency, to hazard their lives, by inhabiting a houſe almoſt as ſoon as the maſons, plaiſterers, &c. have done with it; ſuch houſes are not only dangerous from their dampneſs, but likewiſe from the ſmell of lime, paint, &c. The aſthmas, conſumptions, and other diſeaſes of the lungs, ſo incident to people who work in theſe articles, are ſufficient proofs of their being unwholeſome.

Rooms are often rendered damp by an unſeaſonable piece of cleanlineſs; I mean the pernicious cuſtom of waſhing them immediately before company is put into them. Moſt people catch cold, if they ſit but a very ſhort time in a room that has been lately waſhed; the delicate ought carefully to avoid ſuch a ſituation, and even the robuſt are not always proof againſt its influence †.

Sudden Tranſitions from Heat to Cold.

The perſpiration is commonly obſtructed by SUDDEN TRANSITIONS from heat to cold. Colds are ſeldom caught unleſs when people have been too much heated. Heat rarefies the blood, quickens the circulation, and increaſes the perſpiration; but when theſe are ſuddenly checked, the conſequences muſt be bad. It is indeed impoſſible for labourers not to be too hot upon ſome occaſions; but it is generaly in their power to let themſelves cool gradually, to put on their clothes when they leave off work, to make choice of a dry place to reſt themſelves in, and to avoid ſleeping in the open fields. Theſe eaſy rules, if obſerved, would often prevent fevers and other fatal diſorders.

† People imagine if a good fire is made in a room after it has been waſhed, that there is no danger from ſitting in it; but they muſt give me leave to ſay that this increases the danger. The evaporation excited by the fire generates cold, and renders the damp more active.

It is very common for people, when hot, to drink freely of cold water, or ſmall liquors. This conduct is extremely dangerous. Thirſt indeed is hard to bear, and the inclination to gratify that habit frequently gets the better of reaſon, and makes us do what our judgment diſapproves. Every peaſant, however, knows if his horſe be permitted to drink his bellyful of cold water after violent exerciſe, and be immediately put into the ſtable, or ſuffered to remain at reſt, that it will kill him. This they take the utmoſt care to prevent. It were well if they were equally attentive to their own ſafety.

Thirſt may be quenched many ways without ſwallowing large quantities of cold liquor. The fields afford variety of acid fruits and plants, the very chewing of which would abate thirſt. Water kept in the mouth for ſome time, and ſpit out again, if frequently repeated, will have the ſame effect. If a bit of bread be eaten along with a few mouthfuls of water, it will both quench thirſt more effectualy, and make the danger leſs. When a perſon is extrememly hot, a mouthful of brandy, or other ſpirits, if it can be obtained, ought to be preferred to any thing elſe. But if any one has been ſo fooliſh, when hot, as to drink freely of cold liquor, he ought to continue his exerciſe at leaſt till what he drank be thorougly warmed upon his ſtomach.

It would be tedious to enumerate all the bad effects which flow from drinking cold liquors when the body is hot. Sometimes this has occaſioned immediate death. Hoarſeneſs, quinſeys, and fevers of various kinds, are its common conſequences. Neither is it ſafe when warm to eat freely of raw fruits, ſalads, or the like. Theſe indeed have not ſo ſudden an effect on the body as cold liquors, but they are notwithſtanding dangerous, and ought to be avoided.

Sitting in a warm room, and drinking hot liquors till the pores are quite open, and immediately going into the cold air, is extremely dangerous. Colds, coughs, and inflammations of the breaſt are the uſual effects of this conduct; yet nothing is more common than for

people, after they have drank warm liquors for ſeveral hours, to walk or ride a number of miles in the coldeſt night or to ramble about in the ſtreets *.

People are very apt when a room is hot, to throw open a window, and to ſit near it. This is a moſt dangerous practice. Any perſon had better ſit without doors than in ſuch a ſituation, as the current of air is directed againſt one particular part of the body. Inflammatory fevers, and conſumptions, have often been occaſioned by ſitting or ſtanding thinly clothed near an open window. Nor is ſleeping with open windows leſs to be dreaded. That ought never to be done, even in the hotteſt ſeaſon, unleſs the window is at a diſtance. I have known mechanics frequently contract fatal diſeaſes by working ſtripped at an open window, and would adviſe all of them to beware of ſuch a practice.

Few things expoſe people more to catch cold than keeping their houſes too warm: ſuch perſons may be ſaid to live in a ſort of hot houſes; they can hardly ſtir abroad to viſit a neighbour but at the hazard of their lives. Were there no other reaſon for keeping houſes moderately cool, that alone is ſufficient: but no houſe that is too hot can be wholeſome; heat deſtroys the ſpring and elaſticity of the air, and renders it leſs fit for expanding the lungs, and the other purpoſes of reſpiration. Hence it is that conſumptions and other diſeaſes of the lungs prove ſo fatal to people who work in forges, glaſs houſes, and the like.

Some are even ſo fool hardy, as to plunge themſelves, when hot, into cold water. Not only fevers, but madneſs itſelf, has frequently been the effect of this conduct. Indeed it looks too like the action of a madman to deſerve a ſerious conſideration.

* The tap rooms of London and other great towns, where such numbers of people ſpend their evenings, are highly pernicious. The breath of a number of people crowded into a low apartment, with the addition of fire, candles, the ſmoke of tobacco, and the fumes of hot liquor, &c. muſt not only render it hurtful to continue in such places, but dangerous to go out of them into a cold and chilly atmoſphere.

The reſult of theſe obſervations is, that every one ought to avoid, with the utmoſt attention, all ſudden tranſitions from heat to cold, and to keep the body in as uniform a temperature as poſſible; or where that cannot be done, to take care to let it cool gradually.

People may imagine that too ſtrict an attention to theſe things would tend to render them delicate. So far however is this from being my deſign, that the very firſt rule propoſed for preventing colds is, to harden the body, by enuring it daily to the open air.

I ſhall put an end to what relates to this part of my ſubject by giving an abſtract of the juſtly celebrated advice of Celſus, with reſpect to the preſervation of health. "A man," ſays he, "who is bleſſed with good "health, ſhould confine himſelf to no particular rules "either with reſpect to regimen or medicine. He ought "frequently to diverſify his manner of living; to be "ſometimes in town, ſometimes in the country; to "hunt, ſail, indulge himſelf in reſt, but more frequent-"ly to uſe exerciſe. He ought to refuſe no kind of "food that is commonly uſed, but ſometimes to eat "more and ſometimes leſs; ſometimes to make one at "an entertainment, and ſometimes to forbear it; to "make rather two meals a day than one, and always "to eat heartily, provided he can digeſt it. He ought "neither too eagerly to purſue, not too ſcrupulouſly "to avoid intercourſe with the fair ſex; pleaſures of "this kind, rarely indulged, render the body alert, "and active; but when too frequently repeated, weak "and languid. He ſhould be careful in time of health "not to deſtroy, by exceſſes of any kind, that vigour "of conſtitution which ſhould ſupport him under ſick-"neſs."

The moſt rational and enlightened rules of medicine inſtead of laying a diſagreeable reſtraint on men, dictate only the means by which any reaſonable perſon would naturally be directed, and point out more rational and certain maxims for enjoyment and gratification than can be attained by the votary of faſhion or Bacchanalian joys.

PART II.

OF DISEASES.

CHAP. XII.

Of the KNOWLEDGE *and* CURE *of* DISEASES.

THE curing of diſeaſes does not depend ſo much upon ſcientific principles as many imagine. It is chiefly the reſult of experience and obſervation. By attending the ſick, and carefully obſerving the various occurrences in diſeaſes, a great degree of accuracy may be acquired both in diſtinguiſhing their ſymptoms, and in the application of medicines. Hence ſenſible nurſes, and other perſons who wait upon the ſick, often foreſee a diſeaſe ſooner than thoſe who have been bred to phyſic. We do not, however, mean to inſinuate that a medical education is of no uſe; it is doubtleſs of the greateſt importance, but it never can ſupply the place of obſervation and experience.

Every diſeaſe may be conſidered as an aſſemblage of ſymptoms, and muſt be diſtinguiſhed by thoſe which are moſt obvious and permanent. Inſtead, therefore, of giving a claſſical arrangement of diſeaſes, according to the ſyſtematic method, it will be more ſuitable, in a performance of this nature, to give a full and accurate deſcription of each particular diſeaſe as it occurs; and where any of the ſymptoms of one diſeaſe have a near reſemblance to thoſe of another, to take notice of that circumſtance, and at the ſame time to point out the peculiar or characteriſtic ſymptoms by which it may be diſtinguiſhed. By a due attention to theſe, the inveſtigation of diſeaſes will be found to be a leſs difficult matter than moſt people would at firſt be ready to imagine.

A proper attention to the patient's age, ſex, temper of mind, conſtitution, and manner of life, will likewiſe greatly aſſiſt both the inveſtigation and treament of diſeaſes.

In childhood, the fibres are lax and ſoft, the nerves extremely irritable, and the fluids thin; whereas in old age, the fibres are rigid, the nerves become almoſt inſenſible, and many of the veſſels impervible. Theſe and other peculiarities render the diſeaſes of the young and aged very different, and of courſe they muſt require a different method of treatment.

Females are liable to many diſeaſes which do not afflict the other ſex: beſides, the nervous ſyſtem being more irritable in them than in men, their diſeaſes require to be treated with greater caution. They are leſs able to bear large evacuations; and all ſtimulating medicines ought to be adminiſtered to them with a ſparing hand.

Particular conſtitutions not only diſpoſe perſons to peculiar diſeaſes, but likewiſe render it neceſſary to treat theſe diſeaſes in a peculiar manner. A delicate perſon, for example, with weak nerves, who lives moſtly within doors, muſt not be treated, under any diſeaſe, preciſely in the ſame manner as one who is hardy and robuſt, and who is much expoſed to the open air.

The temper of mind ought to be carefully attended to in diſeaſes. Fear, anxiety, and a fretful temper, both occaſion and aggravate diſeaſes. In vain do we apply medicines to the body to remove maladies which proceed from the mind. When it is affected, the beſt medicine is to ſooth the paſſions, to divert the mind from anxious thought, and to keep the patient as eaſy and cheerful as poſſible.

Attention ought likewiſe to be paid to the climate, or place where the patient lives, the air he breathes, his diet, &c. Such as live in low marſhy ſituations are ſubject to many diſeaſes which are unknown to the inhabitants of high countries. Thoſe who breath the impure air of cities, have many maladies to which the more happy ruſtics are entire ſtrangers. Perſons who feed

groſsly, and indulge in ſtrong liquors, are liable to diſeaſes which do not affect the temperate and abſtemious, &c.

It has already been obſerved, that the different occupations and ſituations in life diſpoſe men to peculiar diſeaſes. It is therefore neceſſary to inquire into the patient's occupation, manner of life, &c. This will not only aſſiſt us in finding out the diſeaſe, but will likewiſe direct us in the treatment of it. It would be very imprudent to treat the laborious and the ſedentary preciſely in the ſame manner, even ſuppoſing them to labour under the ſame diſeaſe.

It will likewiſe be proper to inquire, whether the diſeaſe be conſtitutional or accidental; whether it has been of long or ſhort duration; whether it proceeds from any great and ſudden alteration in the diet, manner of life, &c. The ſtate of the patient's body, and of the other evacuations, ought always to be enquired into; and likewiſe whether he can with eaſe perform all the vital and animal functions, as breathing, digeſtion, &c.

Laſtly, it will be proper to inquire into the diſeaſes the patient has formerly been liable to, and what medicines were moſt beneficial to him; if he has a ſtrong averſion to any particular drug, &c.

As many of the indications of cure may be anſwered by diet alone, it is always the firſt thing to be attended to in the treatment of diſeaſes. Thoſe who know no better, imagine that every thing that goes by the name of a medicine poſſeſs ſome wonderful power or ſecret charm, and think, if the patient ſwallows enough of drugs, that he muſt do well. This miſtake has many ill conſequences; it makes people truſt in drugs, and neglect their own endeavours; beſides, it diſcourges all attempts to relieve the ſick where medicines cannot be obtained.

Medicines are no doubt uſeful in their places; and when adminiſtered with prudence, may do much good; but when they are put in place of every thing elſe, or adminiſtered at random, which is not ſeldom the caſe, they muſt do miſchief. We would therefore wiſh

to call the attention of mankind from the purſuit of ſecret medicines, to ſuch things as they are acquainted with. The proper regulation of theſe may often do much good, and there is little danger of their ever doing hurt.

Every diſeaſe weakens the digeſtive powers. The diet ought therefore, in all diſeaſes, to be light and of eaſy digeſtion. It would be as prudent for a perſon with a broken leg to attempt to walk, as for one in a fever to eat the ſame kind of food, and in the ſame quantity as when he was in perfect health. Even abſtinence alone will often cure a fever, eſpecially when it has been occaſioned by exceſs in eating or drinking.

In all fevers attended with inflammation, as pleuriſies, peripneumonies, &c. thin gruels, wheys, watery infuſions of mucilaginous plants, roots, &c. are not only proper for the patient's food, but they are likewiſe the beſt medicines which can be adminiſtered.

In fevers of a ſlow, nervous, or putrid kind, where there are no ſymptoms of inflammation, and where the patient muſt be ſupported with cordials, that intention can always be more effectually anſwered by nouriſhing diet and generous wines, than by any medicines yet know.

Nor is the proper attention to diet of leſs importance in chronic than in acute diſeaſes. Perſons afflicted with low ſpirits, wind, weak nerves, and other hypochondriacal affections, generally find more benefit from the uſe of ſolid food and generous liquors, than from all the cordial and carminative medicines which can be adminiſtered to them.

The ſcurvy, that moſt obſtinate malady, will ſooner yield to a proper vegetable diet, than to all the boaſted antiſcorbutic remedies of the ſhops.

In conſumptions, when the humours are vitiated, and the ſtomach ſo much weakened as to be unable to digeſt the ſolid fibres of animals, or even to aſſimilate the juices of vegetables, a diet conſiſting chiefly of milk, will not only ſupport the patient, but will often cure the diſeaſe after every other medicine has failed.

Nor is an attention to other things of leſs importance than to diet. The ſtrange infatuation which has long induced people to ſhut up the ſick from all communication with the external air, has done great miſchief. Not only in fevers, but in many other diſeaſes, the patient will receive more benefit from having the freſh air prudently admitted into his chamber than from all the medicines which can be given him.

Exerciſe may likewiſe in many caſes be conſidered as a medicine. Sailing, or riding on horſeback, for example, will be of more ſervice in the cure of conſumptions, glandular obſtructions, &c. than any medicine yet known. In diſeaſes which proceed from a relaxed ſtate of the ſolids, the cold bath, and other parts of the gymnaſtic regimen, will be found equally beneficial.

Few things are of greater importance in the cure of diſeaſes than cleanlineſs. When a patient is ſuffered to lie in dirty clothes, whatever perſpires from his body is again reſorbed, or taken up into it, which ſerves to nouriſh the diſeaſe and increaſe the danger. Many diſeaſes may be cured by cleanlineſs alone; moſt of them may be mitigated by it, and in all of them it is highly neceſſary both for the patient and thoſe who attend him.

Many other obſervations, were it neceſſary, might be adduced to prove the importance of a proper regimen in diſeaſes. Regimen will often cure diſeaſes without medicine, but medicine will ſeldom ſucceed where a proper regimen is neglected; for this reaſon, in the treatment of diſeaſes, we have always given the firſt place to regimen. Thoſe who are ignorant of medicine confine themſelves to it only. For others who have more knowledge, we have recommended ſome of the moſt ſimple and approved forms of medicine in every diſeaſe. Theſe, however, are never to be adminiſtered but by people of better underſtanding; nor even by them without the greateſt precaution.

It has been objected to this book, that it would be the cauſe of ignorant perſons tampering with their health, &c. exerciſing a dangerous and fatal ſort of domeſtic quackery. Such objection, however, can no-

ly proceed from ignorance of its contents, or a deſire to miſlead. Inſtead of encouraging the uſe of medicine, it will to a man of common underſtanding, exhibit a caution againſt the dangerous practice of recurring, on every occaſion, to the apothecaries ſhop, or uſing even the moſt ſimple remedy without due attention.

It has rather been my wiſh to explode as much as poſſible the uſe of drugs, and recommend inſtead of them, a due regard to prevent diſorders, by pure air, moderate exerciſe, temperate and wholeſome diet, cleanlineſs, and the control of the paſſions. In caſes of actual diſeaſe, I would recommend to no perſon to take medicine without the beſt advice, but even there to confine himſelf to regimen. The remedies I have recommended are ſafe, and will, I truſt, be found as effectual and ſalutary as if they had been written in the jargon of apothecaries' latin, accompanied with all their barbarous hieroglyphics.

CHAP. XIII.

OF FEVERS IN GENERAL.

AS more than one half of mankind is ſaid to periſh by fevers, it is of importance to be acquainted with their cauſes. The moſt general cauſes of fevers are, *infection*, *errors in diet*, *unwholeſome air*, *violent emotions of the mind*, *exceſs or ſuppreſſion of uſual evacuations*, *external or internal injuries*, *and extreme degrees of heat or cold*. As moſt of theſe have already been treated of at conſiderable length, and their effects ſhewn, we ſhall not now reſume the conſideration of them, but ſhall only recommend it to all, as they would wiſh to avoid fevers, and other fatal diſeaſes, to pay the moſt punctual attention to theſe articles.

Fevers are not only the moſt frequent of all diſeaſes, but they are likewiſe the moſt complex. In the moſt ſimple ſpecies of fever there is always a combination of ſe-

veral different ſymptoms. The diſtinguiſhing ſymptoms of fever are, increaſed heat, frequency of pulſe, loſs of appetite, general delibity, pain in the head, and a difficulty in performing ſome of the vital or animal functions.

The other ſymptoms uſually attendant on fevers are, nauſea, thirſt, anxiety, delirium, wearineſs waſting of the fleſh, want of ſleep, or the ſleep diſturbed and not refreſhing.

When the fever comes on gradually, the patient generally complains firſt of languor or liſtleſſneſs, ſoreneſs of the fleſh, or the bones, as the country people expreſs it, heavineſs of the head, loſs of appetite, ſickneſs, with clammineſs of the mouth; after ſome time come on exceſſive heat, violent thirſt, reſtleſſneſs, &c.

When the fever attacks ſuddenly, it always begins with an uneaſy ſenſation of exceſſive cold, accompanied with delibity and loſs of appetite; frequently the cold is attended with ſhiverings, oppreſſion about the heart, and ſickneſs at the ſtomach, or vomiting.

Fevers are divided into continual, remitting, intermitting, and ſuch as are attended with cutaneous eruption or topical inflammation, as the ſmall pox, eriſipelas, &c. By a continual fever is meant that which never leaves the patient during the whole courſe of the diſeaſe, or which ſhews no remarkable increaſe or abatement in the ſymptoms. This kind of fever is likewiſe divided into acute, ſlow, and malignant. The fever is called acute when its progreſs is quick, and the ſymptoms violent; but when theſe are more gentle, it is generally denominated ſlow. When livid or petechial ſpots ſhew a putrid ſtate of humours, the fever is called malignant, putrid, or petechial.

A remitting fever differs from a continual only in degree. It has frequent increaſes and decreaſes, or exacerbations and remiſſions, but never wholly leaves the patient during the courſe of the diſeaſe. Intermitting fevers or agues, are thoſe which, during the time that the patient may be ſaid to be ill, have evident intervals or remiſſions of the ſymptoms.

As a fever is only an effort of Nature to free herſelf

from an offending cauſe, it is the buſineſs of thoſe who have the care of the ſick to obſerve with diligence which way Nature points, and to endeavour to aſſiſt her operations. Our bodies are ſo framed, as to have a conſtant tendency to expel or throw off whatever is injurious to health. This is generally done by urine, ſweat, ſtool, expectoration, vomit, or ſome other evacuation.

There is reaſon to believe, if the efforts of Nature, at the beginning of a fever, were duly attended to and promoted, it would ſeldom continue long; but when her attempts are either neglected or counteracted, it is no wonder if the diſeaſe proves fatal. There are daily inſtances of perſons who, after catching cold, have all the ſymptoms of a beginning fever; but by keeping warm, drinking diluting liquors, bathing their feet in warm water, &c. the ſymptoms in a few hours diſappear, and the danger is prevented. When fevers of a putrid kind threaten, the beſt method of obviating their effects is by repeated vomits.

Our deſign is not to enter into a critical inquiry into the nature and immediate cauſe of fevers, but to mark their moſt obvious ſymptoms, and to point out the proper treatment of the patient with reſpect to his diet, drink, air, &c. in the different ſtages of the diſeaſe. In theſe articles the inclinations of the patient will in a great meaſure direct our conduct.

Almoſt every perſon in a fever complains of great thirſt, and calls out for drink, eſpecially of a cooling nature. This at once points out the uſe of water, and other cooling liquors. What is ſo likely to abate the heat, attenuate the humours, remove ſpaſms, and obſtructions, promote perſpiration, increaſe the quantity of urine, and in ſhort produce every ſalutary effect in an ardent inflammatory fever, as drinking plentifully of water, thin gruel, or any other weak liquor, of which water is the baſis? The neceſſity of diluting liquors is pointed out by the dry tongue, the parched ſkin, and the burning heat, as well as by the unquenchable thirſt of the patient.

Many cooling liquors which are extremely grateful

to patients in a fever, may be prepared from fruits, as decoctions of tamarinds, apple tea, orange whey, and the like. Mucilaginous liquors might alſo be prepared from marſhmallow roots, linſeed, lime tree buds, and other mild vegetables. Theſe liquors, eſpecially when acidulated, are highly agreeable to the patient, and ſhould never be denied him.

At the beginning of a fever, the patient generally complains of great laſſitude or wearineſs, and has no inclination to move. This evidently ſhows the propriety of keeping him eaſy, and, if poſſible in bed. Lying in bed, relaxes the ſpaſms, abates the violence of the circulation, and gives Nature an opportunity of exerting all her force to overcome the diſeaſe. The bed alone would often remove a fever at the beginning; but when the patient ſtruggles with the diſeaſe, inſtead of driving it off, he only fixes it the deeper, and renders it more dangerous. This obſervation is too often verified in travellers, who happen when on a journey to be ſeized with a fever. Their anxiety to get home induces them to travel with a fever upon them; which conduct ſeldom fails to render it fatal.

In fevers, the mind as well as the body ſhould be kept eaſy. Company is ſeldom agreeable to the ſick. Indeed every thing that diſturbs the imagination, increaſes the diſeaſe; for which reaſon every perſon in a fever ought to be kept perfectly quiet, and neither allowed to ſee nor hear any thing that may in the leaſt affect or diſcompoſe his mind.

Though the patient in a fever has the greateſt inclination for drink, yet he ſeldom has any appetite for ſolid food: hence the impropriety for urging him to take victuals is evident. Much ſolid food in a fever is every way hurtful. It oppreſſes nature, and, inſtead of nouriſhing the patient, ſerves only to feed the diſeaſe. What food the patient takes, ſhould be in ſmall quantity, light, and of eaſy digeſtion. It ought to be chiefly of the vegetable kind, as panada, roaſted apples, gruels, and ſuch like.

Poor people, when any of their family are taken ill,

run directly to their rich neighbours for cordials, and pour wine, ſpirits, &c. into the patient, who perhaps never had accuſtomed to taſte ſuch liquors when in health. If there be any degree of fever, this conduct muſt increaſe it; and if there be none, this is the ready way to raiſe one. Stuffing the patient with ſweetmeats, and other delicacies, is likewiſe very pernicious. Theſe are always harder to digeſt than common food, and cannot fail to hurt the ſtomach.

Nothing is more deſired by a patient in a fever, than freſh air. It not only removes his anxiety, but cools the blood, revives the ſpirits, and proves every way beneficial. Many patients are in a manner ſtifled to death in fevers for want of freſh air; yet ſuch is the unaccountable infatuation of moſt people, that the moment they think a perſon in a fever, they imagine he ſhould be kept in a cloſe chamber, into which not one particle of freſh air muſt be admitted. Inſtead of this, there ought to be a conſtant ſtream of freſh air into a ſick perſon's chamber, ſo as to keep it moderately cool. Indeed, its degree of warmth ought never to be greater than is agreeable to one in perfect health.

Nothing ſpoils the air of a ſick perſon's chamber, or hurts the patient more, than a number of people breathing in it. When the blood is inflamed, or the humours in a putrid ſtate, air that has been breathed repeatedly will greatly increaſe the diſeaſe. Such air not only loſes its ſpring, and becomes unfit for the purpoſe of reſpiration, but acquires a noxious quality, which renders it in a manner poiſonous to the ſick.

In fevers, when the patient's ſpirits are low and depreſſed, he is not only to be ſupported with cordials, but every method ſhould be taken to cheer and comfort his mind. Many, from a miſtaken zeal, when they think a perſon in danger, inſtead of ſolacing his mind with the hopes and conſolations of religion, frighten him with the views of hell and damnation. It would be unſuitable here to dwell upon the impropriety and dangerous conſequences of this conduct; it often hurts the body, and there is reaſon to believe ſeldom benefits the ſoul.

Among common people, the very name of a fever generally ſuggeſts the neceſſity of bleeding. This notion ſeems to have taken its riſe from moſt fevers in this country having been formerly of an inflammatory nature; but true inflammatory fevers are now ſeldom to be met with. Sedentary occupations, and a different manner of living, have ſo changed the ſtate of diſeaſes in Britain, that there is now hardly one fever in ten where the lancet is neceſſary. In moſt low, nervous, and putrid fevers, which are now ſo common, bleeding is really hurtful, as it weakens the patient, ſinks his ſpirits, &c. We would recommend this general rule, never to bleed at the beginning of a fever unleſs there be evident ſigns of inflammation. Bleeding is an excellent medicine when neceſſary, but ſhould never be wantonly performed.

It is likewiſe a common notion, that ſweating is always neceſſary in the beginning of a fever. When the fever proceeds from an obſtructed perſpiration, this notion is not ill founded. If the patient only lie in bed, bathe his feet and legs in warm water, and drink freely of warm water gruel, or any other weak diluting liquor, he will ſeldom fail to perſpire freely. The warmth of the bed, and the diluting drink, will relax the univerſal ſpaſm, which generally affects the ſkin at the beginning of a fever: it will open the pores, and promote the perſpiration, by means of which the fever may often be carried off. But inſtead of this, the common practice is to heap clothes upon the patient, and to give him things of a hot nature, as ſpirits, ſpiceries, &c. which fire his blood, increaſe the ſpaſms, and render the diſeaſe more dangerous.

In all fevers, a proper attention ſhould be paid to the patient's longings. Theſe are the calls of Nature, and often point out what may be of real uſe. Patients are not indeed to be indulged in every thing that the ſickly appetite may crave; but it is generally right to let them have a little of what they eagerly deſire, though it may not ſeem altogether proper. What the patient longs for,

his ſtomach will generally digeſt, and ſuch things have ſometimes a very happy effect.

When a patient is recovering from a fever, great care is neceſſary to prevent a relapſe. Many perſons, by too ſoon imagining themſelves well, have loſt their lives, or contracted other diſeaſes of an obſtinate nature. As the body after a fever is weak and delicate, it is neceſſary to guard againſt catching cold. Moderate exerciſe in the open air will be of uſe, but great fatigue is by all means to be avoided; agreeable company will alſo have a good effect. The diet muſt be light, but nouriſhing. It ſhould be taken frequently, but in ſmall quantities. It is dangerous at ſuch a time to eat as much as the ſtomach may crave.

Nothing can be more abſurd than a general remedy in caſes of fevers, of which there is ſuch a variety of ſorts, attended with ſuch a variety of ſymptoms. Yet for half a century a powder, ſaid to poſſeſs great virtue in their cure, has been ſwallowed in great quantities here and throughout half the world, in all caſes and ſituations. Bleeding uſed formerly to be equally prevalent. In ſhort, faſhion reigns in phyſic with as arbitrary a ſway as in dreſs, or any of the moſt indifferent things.

This powder is not confined to the uſe of fevers, but like other quack medicines, cures every complaint; and there are many examples, not only of its immediate fatal conſequences when uſed improperly, but ſtill more when its conſtant repetition has deſtroyed the conſtitution, or occaſioned the loſs of the extremities.

A fever requires to be attentively watched in its progreſs, in order to enable the moſt ſkilful phyſician to preſcribe the regimen as well as medicines, as the ſymptoms and changes occur. To ſpeak, therefore, of a univerſal remedy in fevers, is the extreme of abſurdity.

CHAP. XIV.

OF INTERMITTING FEVERS, OR AGUES.

INTERMITTING fevers afford the beſt opportunity both of obſerving the nature of a fever, and alſo the effects of medicine. No perſon can be at a loſs to diſtinguiſh an intermitting fever from any other, and the proper medicine for it is now almoſt univerſally known.

The ſeveral kinds of intermitting fevers take their names from the period in which the fit returns, as quotidian, tertian, quartan, &c.

CAUSES.——Agues are occaſioned by effluvia from putrid ſtagnating water. This is evident from their abounding in rainy ſeaſons, and being moſt frequent in countries where the ſoil is marſhy, as in Holland, the Fens of Cambridgeſhire, the Hundreds of Eſſex, &c. This diſeaſe may alſo be occaſioned by eating too much ſtone fruit, by a poor watery diet, damp houſes, evening dews, lying upon the damp ground, watching, fatigue, depreſſing paſſions, and the like. When the inhabitants of a high country remove to a low one, they are generally ſeized with intermiting fevers, and to ſuch the diſeaſe is apt to prove fatal. In a word, whatever relaxes the ſolids, diminiſhes the perſpiration, or obſtructs the circulation in the capillary or ſmall veſſels, diſpoſes the body to agues.

SYMPTOMS——An intermitting fever generally begins with a pain of the head and loins, wearineſs of the limbs, coldneſs of the extremities, ſtretching, yawning, with ſometimes great ſickneſs and vomiting; to which ſucceed ſhivering and violent ſhaking. Afterward, the ſkin becomes moiſt, and a profuſe ſweat breaks out, which generally terminates the fit or paroxyſm. Sometimes indeed the diſeaſe comes on ſuddenly, when the perſon thinks himſelf in perfect health; but it is more commonly preceded by liſtleſsneſs, loſs of appetite, and the ſymptoms above mentioned

REGIMEN.—While the fit continues, the patient ought to drink freely of water gruel, orange whey, weak camomile tea; or, if his ſpirits be low, ſmall wine whey, ſharpened with the juice of lemon. All his drink ſhould be warm, as that will aſſiſt in bringing on the ſweat, and conſequently ſhorten the paroxyſm *.

Between the paroxyſms, the patient muſt be ſupported with food that is nouriſhing, but light and eaſy of digeſtion, as veal or chicken broths, ſago, gruel with a little wine, light puddings, and ſuch like. His drink may be ſmall negus, acidulated with the juice of lemons or oranges, and ſometimes a little weak punch. He may likewiſe drink infuſions of bitter herbs, as camomile, wormwood, or water trefoil, and may now and then take a glaſs of ſmall wine, in which gentian root, centaury, or ſome other bitter, has been infuſed.

As the chief intentions of cure in an ague are to brace the ſolids, and promote perſpiration, the patient ought to take as much exerciſe between the fits as he can bear. If he be able to go abroad, riding on horſeback, or in a carriage, will be of great ſervice. But if he cannot bear that kind of exerciſe, he ought to take ſuch as his ſtrength will permit. Nothing tends more to prolong an intermitting fever, than indulging a lazy indolent diſpoſition.

Intermitting fevers, under a proper regimen, will often go off without medicine; and when the diſeaſe is mild, in an open dry country, there is ſeldom any danger from allowing it to take its courſe; but when the patient's ſtrength ſeems to decline, or the paroxyſms are ſo violent that his life is in danger, medicine ought immediately to be adminiſtered. This, however, ſhould never be done till the diſeaſe be properly formed, that is to ſay, till the patient has had ſeveral fits of ſhaking and ſweating.

* Dr. Lind says, that twenty or twenty-five drops of laudanum put into a cup of the patient's drink, and given about half an hour after the commencement of the hot fit, promotes the sweat, shortens the fit, relieves the head, and tends greatly to remove the disease.

MEDICINE.—The firſt thing to be done in the cure of an intermitting fever is to cleanſe the ſtomach and bowels. This not only renders the application of other medicines more ſafe but likewiſe more efficacious. In this diſeaſe the ſtomach is generally loaded with cold viſcid phlegm, and frequently great quantities of bile are diſcharged by vomit, which plainly points out the neceſſity of ſuch evacuations. Vomits are therefore to be adminiſtered before the patient takes any other medicine. A doſe of ipecacuanha will generally anſwer this purpoſe very well; a ſcruple or half a drachm of the powder will be ſufficient for an adult, and for a younger perſon the doſe muſt be leſs in proportion. After the vomit begins to operate, the patient ought to drink plentifully of weak camomile tea. The vomit ſhould be taken two or three hours before the return of the fit, and may be repeated at the diſtance of two or three days. Vomits not only cleanſe the ſtomach, but increaſe the perſpiration, and all the other ſecretions, which render them of ſuch importance, that they often cure intermitting fevers without the aſſiſtance of any other medicine.

Purging medicines are likewiſe uſeful and often neceſſary in intermitting fevers. A ſmart purge has been known to cure an obſtinate ague, after the Peruvian bark and other medicines had been uſed in vain. Vomits, however, are more ſuitable in this diſeaſe, and render purging leſs neceſſary; but if the patient be afraid to take a vomit, he ought in this caſe to cleanſe the bowels by a doſe or two of Glauber's ſalts, jalap, or rhubarb.

Bleeding may ſometimes be proper at the beginning of an intermitting fever, when exceſſive heat, a delirium, &c. give reaſon to ſuſpect an inflammation; but as the blood is ſeldom in an inflammatory ſtate in intermitting fevers, this operation is rarely neceſſary; when frequently repeated, it tends to prolong the diſeaſe.—After proper evacuations, the patient may ſafely uſe the Peruvian bark, which may be taken in any way that is moſt agreeable to him. No preparation of the bark

ſeems to anſwer better than the moſt ſimple form in which it can be given, viz. in powder.

Two ounces of the beſt Peruvian bark, finely powdered, may be divided into twenty four doſes. Theſe may either be made into boluſſes, as they are uſed, with a little ſyrup of lemon, or mixed in a glaſs of red wine, a cup of camomile tea, water gruel, or any other drink that is more agreeable to the patient *.

In an ague which returns every day, one of the above doſes may be taken every two hours during the interval of the fits. By this method, the patient will be able to take five or ſix doſes between each paroxyſm. In a tertian, or third day ague, it will be ſufficient to take a doſe every third hour during the interval, and in a quartan every fourth. If the patient cannot take ſo large a doſe of the bark, he may divide each of the powders into two parts, and take one every hour, &c. For a young perſon, a ſmall quantity of this medicine will be ſufficient, and the doſe muſt be adapted to the age, conſtitution, and violence of the ſymptoms §.

The above quantity of bark will frequently cure an ague; the patient, however, ought not to leave off taking the medicine as ſoon as the paroxyſms are ſtopped, but ſhould continue to uſe it till there is reaſon to believe the diſeaſe is entirely overcome. Moſt of the failures in the cure of this diſeaſe are owing to patients not continuing to uſe the medicines long enough. They

* It has been obſerved, that the red bark is more powerful than that which has for some time been in common use. Its ſuperior efficacy ſeems to arise from its being of a more perfect growth than the quill bark, and consequently more fully impregnated with the medical properties of the plant.

§ In intermitting fevers of an obſtinate nature, I have found it neceſſary to throw in the bark much faster. Indeed, the benefits arising from this medicine depend chiefly upon a large quantity of it being administered in a short time. Several ounces of bark given in a few days, will do more than as many pounds taken in the course of some weeks. When this medicine is intended either to ſtop a mortification, or cure an obſtinate ague, it ought to be thrown in as faſt as the ſtomach can possibly bear it. Inattention to this circumſtance has hurt the reputation of one of the beſt medicines of which we are in poſſeſſion.

are generally directed to take it till the fits are ſtopped, then to leave it off, and begin again at ſome diſtance of time: by which means the diſeaſe gathers ſtrength, and often returns with as much violence as before. A relapſe may always be prevented by the patient's continuing to take doſes of the medicine for ſome time after the ſymptoms diſappear. This is both the moſt ſafe and effectual method of cure.

An ounce of gentian root, calamus aromaticus, and orange peel, of each half an ounce, with three or four handfuls of camomile flowers, and an handful of coriander ſeed, all bruiſed together in a mortar, may be uſed in form of infuſion or tea; about half an handful of theſe ingredients may be put into a tea pot, and an Engliſh pint of boiling water poured upon them. A cup of this infuſion drank three or four times a day, will greatly promote the cure. Such patients as cannot drink the watery infuſion, may put two handfuls of the ſame ingredients into a bottle of white wine, and take a glaſs of it twice or thrice a day. If patients drink freely of the above, or any other proper infuſion of bitters, a ſmaller quantity of bark than is generally uſed will be ſufficient to cure an ague *.

Thoſe who cannot ſwallow the bark in ſubſtance, may take it in decoction or infuſion. An ounce of bark in powder may be infuſed in a bottle of white wine for four or five days, frequently ſhaking the bottle; afterwards let the powder ſubſide, and pour off the clear liquor. A wine glaſs may be drank three or four times a day, or oftener, as there is occaſion. If a decoction be more agreeable, an ounce of the bark, and two drachms

* There is reaſon to believe that ſundry of our own plants or barks, which are very bitter and aſtringent, would ſucceed in the cure of intermitting fevers, eſpecially when aſſiſted by aromatics. But as the Peruvian bark has been long approved in the cure of this diſeaſe, and is now to be obtained at a very reaſonable rate, it is of leſs importance to ſearch after new medicines. We cannot, however, omit taking notice, that the Peruvian bark is very often adulterated, and that it requires conſiderable ſkill to diſtinguiſh between the genunie and the falſe. This ought to make people very cautious of whom they purchaſe it.

of ſnake root bruiſed, with an equal quantity of ſalt of wormwood, may be boiled in a quart of water, into an Engliſh pint. To the ſtrained liquor may be added an equal quantity of red wine, and a glaſs of it taken frequently.

In obſtinate agues, the bark will be found much more efficacious when aſſiſted by brandy or other warm cordials, than if taken alone; this I have had frequently occaſion to obſerve in a country where intermittent fevers were endemical. The bark ſeldom ſucceeded, unleſs aſſiſted by ſnake root, ginger, canella alba, or ſome other warm aromatics. When the fits are very frequent and violent, in which caſe the fever often approaches towards an inflammatory nature, it will be ſafer to keep out the aromatics, and to add ſalt of tartar in their ſtead; but in an obſtinate tertian or quartan, in the end of autumn, or beginning of winter, warm and cordial medicines are abſolutely neceſſary †.

As autumnal and winter agues generally prove much more obſtinate than thoſe which attack the patient in ſpring or ſummer, it will be neceſſary to continue the uſe of medicines longer in the former than in the latter. A perſon who is ſeized with an intermitting fever in the beginning of winter, ought frequently, if the ſeaſon prove rainy, to take a little medicine, although the diſeaſe may ſeem to be cured, to prevent a relapſe, till the return of the warm ſeaſon; he ought likewiſe to take care not to be too much abroad in wet weather, eſpecially in cold eaſterly winds.

When agues are not properly cured, they often degenerate into obſtinate chronical diſeaſes, as the dropſy, jaundice, &c. For this reaſon all poſſible care ſhould be taken to have them radically cured, before the conſtitution has been too much weakened.

† In obſtinate agues, when the patient is old, the habit phlegmatic, the ſeaſon rainy, the ſituation damp, or the like, it will be neceſſary to mix with two ounces of the bark, half an ounce of Virginian ſnake root, and a quarter of an ounce of ginger, or ſome other warm aromatic; but when the ſymptoms are of an inflammatory nature, half an ounce of ſalt of wormwood, or ſalt of tartar, may be added to the above quantity of bark.

Though nothing is more natural than the method of ·cating intermitting fevers, yet by ſome ſtrange infa- ıation, more charms and whimſical remedies are daily ſed for removing this than any other diſeaſe. There : hardly an old woman who is not in poſſeſſion of a no- rum for ſtopping an ague, and it is amazing with /hat readineſs their pretenſions are believed. Thoſe ı diſtreſs eagerly graſp at any thing that promiſes ıdden relief; but the ſhorteſt way is not always the he beſt in the treatment of diſeaſes. The only method ɔ obtain a ſafe and laſting cure, is gradually to aſſiſt Nature in removing the cauſe of the diſorder.

Some indeed try bold, or rather fool-hardy experi- ıents, to cure agues, as drinking great quantities of rong liquors, jumping into a river, &c. Theſe may ometimes have the deſired effect, but muſt always be ttended with danger. When there is any degree of nflammation, or the leaſt tendency to it, ſuch experi- nents may prove fatal. The only patient whom I re- nember to have loſt in an intermitting fever, evident- y killed himſelf by drinking ſtrong liquor, which ſome ɔerſon had perſuaded him would prove an infallible re- nedy.

Many dirty things are extolled for the cure of inter- nitting fevers, as ſpiders' cobwebs, ſnuffings of candles, &c. Though theſe may ſometimes ſucceed, yet their very naſtineſs is ſufficient to ſet them aſide, eſpecially when cleanly medicines will anſwer the purpoſe better. The only medicine that can be depended upon for thoroughly curing an intermitting fever, is the Peru- vian bark. It may always be uſed with ſafety; and I can honeſtly declare that in all my practice I never knew it fail, when combined with the medicines men- tioned above, and duly perſiſted in.

Where agues are endemical, even children are often afflicted with that diſeaſe. Such patients are very diffi- cult to cure, as they can ſeldom be prevailed upon to take the bark, or any other diſagreeable medicine. One method of rendering this method more palatable, is to make it into a mixture with diſtilled waters and ſyrup,

andafterwards togiveit an agreeable ſharpneſs with the elixir, or ſpirit of vitriol. This both improves the medicine, and takes off the nauſeous taſte. In caſes where the bark cannot be adminiſtered, the ſaline mixture may be given with advantage to children *.

Wine whey is a very proper drink for a child in an ague; to half an Engliſh pint of which may be put a tea ſpoonful of the ſpirit of hartſhorn. Exerciſe is likewiſe of conſiderable ſervice; and when the diſeaſe proves obſtinate, the child ought, if poſſible, to be removed to a warm dry air. The food ought to be nouriſhing, and ſometimes a little generous wine ſhould be allowed.

To children, and ſuch as cannot ſwallow the bark, or when the ſtomach cannot bear it, it may be given by clyſter. Half an ounce of the extract of bark, diſſolved in four ounces of warm water, with the addition of half an ounce of ſweet oil, and ſix or eight drops of laudanum, is the form recommended by Dr. Lind for an adult, and this to be repeated every fourth hour, or oftener, as the occaſion ſhall require. For children the quantity of extract and laudanum muſt be proportionably leſſened. Children have been cured of agues by making them wear a waiſtcoat with powdered bark quilted between the folds of it, by bathing them frequently in a ſtrong decoction of the bark, and by rubbing the ſpine with ſtrong ſpirits, or with a mixture of equal parts of laudanum and the ſaponaceous liniment.

We have been the more full upon this diſeaſe, becauſe it is very common, and becauſe few patients in an ague apply to phyſicians unleſs in extremities. There are, however, many caſes in which the diſeaſe is very irregular, being complicated with other diſeaſes, or attended with ſymptoms which are both very dangerous and very difficult to underſtand. All theſe we have purpoſely paſſed over, as they would only bewilder the generality of readers. When the diſeaſe is very irregular, or the ſymptoms dangerous, the patient ought immediately to apply to a phyſician, and ſtrictly to follow his advice.

* See Appendix, *Saline Mixtures.*

To prevent agues, people muſt endeavour to avoid their cauſes. Theſe have already been pointed out in the beginning of this ſection; we ſhall therefore only add one preventive medicine, which may be of uſe to ſuch as are obliged to live in low, marſhy countries, or who are liable to frequent attacks of this diſeaſe.

Take an ounce of the beſt Peruvian bark, Virginian ſnake root, and orange peel, of each half an ounce; bruiſe them all together, and infuſe for five or ſix days in a bottle of brandy, Holland gin, or any good ſpirit; afterward pour off the clear liquor, and take a wine glaſs of it twice or thrice a day. This indeed is recommending a dram; but the bitter ingredients in a great meaſure take of the ill effects of the ſpirit. Thoſe who do not chuſe it in brandy, may infuſe it in wine; and ſuch as can bring themſelves to chew the bark, will find that method ſucceed very well. Gentian root, or calamus aromaticus, may alſo be chewed by turns for the ſame purpoſe. All bitters ſeem to be antidotes to agues, eſpecially thoſe that are warm and aſtringent.

Nothing is more eſſential in the cure of agues than a frequent change of air.

There is, perhaps, no diſeaſe which ſo many pretend to cure as this. Many are the ſpecifics which the poſſeſſors have received, handed down from father to ſon with the moſt impoſing ſtatements of cures performed by them, after every fruitleſs endeavour of the faculty. The ignorant perſons who relate theſe cures, are not capable of judging how far they were the conſequence of the medicine's operation; they only know that the fits ceaſed after taking it. Still leſs could they judge whether the medicine, in ſtopping the fits, did not introduce into the ſyſtem vitiated humours ſtill more dangerous to the conſtitution, as the ſeeds of ſome other diſeaſe. In no caſe ought ſuch evidence to have weight in medical experiments. Without intending it, they are moſt apt to give a falſe ſtatement, or to aſſert ſuch abſurdities as can never deſerve credit.

CHAP. XV.

OF AN ACUTE CONTINUAL FEVER.

THIS fever is denominated acute, ardent, or inflammatory. It moſt commonly attacks the young, or perſons about the prime and vigour of life, eſpecially ſuch as live high, abound with blood, and whoſe fibres are ſtrong and elaſtic. It ſeizes people at all ſeaſons of the year, but is moſt frequent in the ſpring and beginning of ſummer.

CAUSES.—An ardent fever may be occaſioned by any thing that overheats the body, or produces plethora, as violent exerciſe, ſleeping in the ſun, drinking ſtrong liquors, eating ſpiceries, a full diet, with little exerciſe, &c. It may likewiſe be occaſioned by whatever obſtructs the perſpiration, as lying on the damp ground, drinking cold liquor when the body is hot, night watching, or the like.

SYMPTOMS.——A rigour or chilline ſs generally uſhers in this fever, which is ſoon ſucceeded by great heat, a frequent and full pulſe, pain of the head, dry ſkin, redneſs of the eyes, a florid countenance, pains in the back, loins, &c. To theſe ſucceed difficulty of breathing, ſickneſs, with an inclination to vomit; the patient complains of great thirſt, has not appetite for ſolid food, is reſtleſs, and his tongue generally appears black and rough.

A delirium, exceſſive reſtleſſneſs, great oppreſſion of the breaſt, with laborious reſpiration, ſtarting of the tendons, hiccup, cold, clammy ſweats, and an involuntary diſcharge of urine, are very dangerous ſymptoms.

As this diſeaſe is always attended with danger, the beſt medical aſſiſtance ought to be obtained as ſoon as poſſible. A phyſician may be of uſe at the beginning, but his ſkill is often of no avail afterwards. Nothing can be more unaccountable than the conduct of thoſe who have it in their power at the beginning of a fever to procure the beſt medical aſſiſtance, yet put it off till

things come to an extremity. When the diſeaſe, by delay or wrong treatment, has become incurable, and has exhauſted the ſtrength of the patient, it is in vain to hope for relief from medicine. Phyſicians may indeed aſſiſt Nature; but their attempts muſt ever prove fruitleſs, when ſhe is no longer able to co-operate with their endeavours.

REGIMEN.—From the ſymptoms of this diſeaſe, it is evident, that the blood and other humours require to be diluted; that the perſpiration, urine, ſaliva, and all the other ſecretions, are in too ſmall quantity; that the veſſels are rigid, and the heat of the whole body too great; all theſe clearly point out the neceſſity of a regimen calculated to dilute the blood, correct the acrimony of the humours, allay the exceſſive heat, remove the ſpaſmodic ſtricture of the veſſels, and promote the ſecretions.

Theſe important purpoſes may be greatly promoted by drinking plentifully of diluting liquors; as water gruel, or oatmeal tea, clear whey, barley water, balm tea, apple tea, &c. Theſe may be ſharpened with juice of orange, jelly of currants, rasberries, and ſuch like; orange whey is likewiſe an excellent cooling drink. It is made by boiling among milk and water a bitter orange ſliced, till the curd ſeparates. If no orange can be had, a lemon, a little cream of tartar, or a few ſpoonfuls of vinegar, will have the ſame effect. Two or three ſpoonfuls of white wine may occaſionally be added to the liquor when boiling.

If the patient be coſtive, an ounce of tamarinds, with two ounces of ſtoned raiſins of the ſun, and a couple of figs, may be boiled in three Engliſh pints of water to a quart. This makes a very pleaſant drink, and may be uſed at diſcreation. The common pectoral decoction is likewiſe a very proper drink in this diſeaſe. A tea cup full of it may be taken every two hours, or oftener, if the patient's heat and thirſt be very great ‡.

The above liquids muſt all be drank a little warm.

‡ See Appendix, *Pectoral Decoction.*

They may be uſed in ſmaller quantities at the beginning of a fever, but more freely afterwards, in order to aſſiſt in carrying off the diſeaſe by promoting the different excretions. We have mentioned a variety of drinks, that the patient may have it in his power to chuſe thoſe which are moſt agreeable, and that when tired of one, he may have recourſe to another.

The patient's diet muſt be very ſpare and light. All ſorts of fleſh meats, and even chicken broths, are to be avoided. He may be allowed groat gruel, panada, or light bread boiled in water; to which may be added a few grains of common ſalt, and a little ſugar, which will render it more palatable. He may eat roaſted apples with a little ſugar, toaſted bread with jelly of currants, boiled prunes, &c.

It will greatly relieve the patient, eſpecially in an hot ſeaſon, to have freſh air frequently let into his chamber. This, however, muſt always be done in ſuch a manner as not to endanger his catching cold.

It is too common in fevers to load the patient with bed clothes, under the pretence of making him ſweat, or defending him from the cold. This cuſtom has many ill effects. It increaſes the heat of the body, fatigues the patient, and retards, inſtead of promoting, the perſpiration.

Sitting upright in bed, if the patient is able to bear it, will often have a good effect. It relieves the head, by retarding the motion of the blood to the brain. But this poſture ought never to be continued too long; and if the patient be inclined to ſweat, it will be more ſafe to let him lie, only raiſing his head a little with pillows.

Sprinkling the chamber with vinegar, juice of lemon, or vinegar and roſe water, with a little nitre diſſolved in it, will greatly refreſh the patient. This ought to be done frequently, eſpecially if the weather is hot.

The patient's mouth ſhould be often waſhed with a mixture of water and honey, to which a little vinegar may be added, or with a decoction of figs in barley-water. His feet and hands ought likewiſe frequently to be bathed in lukewarm water; eſpecially if the head is affected.

The patient ſhould be kept as quiet and eaſy as poſſible. Company, noiſe, and every thing that diſturbs the mind, is hurtful. Even too much light, or any thing that affects the ſenſes, ought to be avoided. His attendants ſhould be as few as poſſible, and they ought not to be too often changed. His inclinations ought rather to be ſoothed than contradicted; even the promiſe of what he craves will often ſatisfy him as much as its reality.

MEDICINE.—In this and all other fevers, attended with a hard, full, quick pulſe, bleeding is of the greateſt importance. This operation ought always to be performed as ſoon as the ſymptoms of an inflammatory fever appear. The quantity of blood to be taken away, however, muſt be in proportion to the ſtrength of the patient and the violence of the diſeaſe. If after the firſt bleeding the fever ſhould riſe, and the pulſe become more frequent and hard, there will be a neceſſity for repeating it a ſecond, and perhaps a third, or even a fourth time, which may be done at the diſtance of twelve, eighteen, or twenty four hours from each other, as the ſymptoms require. If the pulſe continue ſoft, and the patient is tolerably eaſy after the firſt bleeding, it ought not to be repeated.

If the heat and fever be very great, forty or fifty drops of the dulcified or ſweet ſpirit of nitre may be made into a draught, with an ounce of roſe water, two ounces of common water, and half an ounce of ſimple ſyrup, or a bit of loaf ſugar. This draught may be given to the patient every three or four hours while the fever is violent; afterwards once in five or ſix hours will be ſufficient.

If the patient be afflicted with reaching, or an inclination to vomit, it will be right to aſſiſt Nature's attempts, by giving him weak camomile tea, or lukewarm water to drink.

If the body is bound, a clyſter of milk and water, with a little ſalt, and a ſpoonful of ſweet oil or freſh butter in it, ought daily to be adminiſtered. Should this not have the deſired effect, a tea ſpoonful of magneſia

alba, or cream of tartar, may be frequently put into his drink. He may likewiſe eat tamarinds, boiled prunes, roaſted apples, and the like.

If about the tenth, eleventh, or twelfth day, the pulſe becomes more ſoft, the tongue moiſter, and the urine begins to let fall a reddiſh ſediment, there is reaſon to expect a favourable iſſue to the diſeaſe. But if, inſtead of theſe ſymptoms, the patient's ſpirits grow languid, his pulſe ſinks, and his breathing becomes difficult; with a ſtupor, trembling of the nerves, ſtarting of the tendons, &c. there is reaſon to fear that the conſequences will be fatal. In this caſe bliſtering plaſters muſt be applied to the head, ancles, inſide of the legs or thighs, as there may be occaſion; poultices of wheat-bread, muſtard, and vinegar, may likewiſe be applied to the ſoles of the feet, and the patient muſt be ſupported with cordials, as ſtrong wine whey, negus, ſago gruel, with wine in it, and ſuch like.

A proper regimen is not only neceſſary during the fever, but likewiſe after the patient begins to recover. By neglecting this, many relapſe, or fall into other diſeaſes, and continue valetudinary for life. Though the body is weak after a fever, yet the diet for ſome time ought to be rather light than of too nouriſhing a nature. Too much food, drink, exerciſe, company, &c. are carefully to be avoided. The mind ought likewiſe to be kept eaſy, and the patient ſhould not attempt to purſue ſtudy, or any buſineſs that requires intenſe thinking.

If the digeſtion is bad, or the patient is ſeized at times with feveriſh heats, an infuſion of Peruvian bark in cold water will be of uſe. It will ſtrengthen the ſtomach, and help to ſubdue the remains of the fever.

When the patient's ſtrength is pretty well recovered, he ought to take ſome gentle laxative. An ounce of tamarinds and a dram of ſenna may be boiled for a few minutes in an Engliſh pint of water, and on ounce of manna diſſolved in the decoction; afterwards it may be ſtrained, and a tea cupful drank every hour till it operates. This doſe may be repeated twice or thrice, five or ſix days intervening betwixt each doſe.

Thoſe who follow laborious employments ought not to return too ſoon to their labour, after a fever, but ſhould keep eaſy till their ſtrength and ſpirits are ſufficiently recruited.

The moſt dangerous thing on recovering from a fever, is the indulgence in eating and drinking, in which the patient is too apt to exceed. The appetite is then unuſually voracious, and requires the greateſt ſelf command; elſe a relapſe is moſt likely to enſue, as well as other ſtill worſe conſequences, ſuch as boils, ulcers, and ſettled ſwellings of the limbs. The diet ought to be light, principally of vegetables, not without, however, the total excluſion of animal food of eaſy digeſtion.

On the firſt appearance of fever, it is neceſſary to obtain the beſt medical advice. Many fall victims to their obſtinacy in perſiſting to ſtruggle againſt it, without even taking to their bed, which would in many caſes ſtop an incipient fever; whereas, the ſtruggling to keep on their legs, inevitably increaſes its force. Others, in the firſt ſymptom, employ hot and volatile ſudorifics, ſmothering themſelves up in bed, under a load of clothes, in a chamber where the air is excluded, in order to excite ſweats. By theſe means the fever muſt certainly increaſe, whereby ſweating as well as every other evacuation, will be prevented. Diluting liquors, while they quench the patient's thirſt, and abate his pains, are the beſt means of promoting perſpiration.

Fevers are in themſelves too fatal: they require not to have their effects increaſed by the abſurd management of the unhappy ſufferers.

CHAP. XVI.

OF THE PLEURISY.

THE true pleuriſy is an inflammation of that membrane called the pleura, which lines the inſide of the breaſt. It is diſtinguiſhed into the moiſt and dry. In

the former, the patient ſpits freely, in the latter, little or none at all. There is likewiſe a ſpecies of this diſeaſe, which is called the *ſpurious* or *baſtard pleuriſy*, in which the pain is more external, and chiefly affects the muſcles between the ribs. The pleuriſy prevails among labouring people, eſpecially ſuch as work without doors, and are of a ſanguine conſtitution. It is moſt frequent in the ſpring ſeaſon.

CAUSES.——The pleuriſy may be occaſioned by whatever obſtructs the perſpiration, as cold northerly winds, drinking cold liquors when the body is hot; ſleeping without doors on the damp ground; wet clothes, plunging the body into cold water, or expoſing it to the cold air when covered with ſweat, &c. It may likewiſe be occaſioned by drinking ſtrong liquors; by the ſtoppage of uſual evacution; as old ulcers, iſſues, ſweating of the feet or hands, &c. the ſudden ſtriking in of any eruption, as the itch, the meaſles, or the ſmall-pox. Thoſe who have been accuſtomed to bleed at a certain ſeaſon of the year, are apt, if they neglect it, to be ſeized with a pleuriſy. Keeping the body too warm by means of fire, clothes, &c, renders it more liable to this diſeaſe. A pleuriſy may likewiſe be occaſioned by violent exerciſe, as running, wreſtling, leaping, or by ſupporting great weight, blows on the breaſt, &c. A bad conformation of the body renders perſons more liable to this diſeaſe, as a narrow cheſt, a ſtraitneſs of the arteries of the pleura, &c.

SYMPTOMS.—This, like moſt other fevers, generally begins with chilline ſs and ſhivering, which are followed by heat, thirſt, and reſtleſſneſs. To theſe ſucceed a violent pricking pain in one of the ſides among the ribs. Sometimes the pain extends towards the back bone, ſometimes towards the forepart of the breaſt, and at other times towards the ſhoulder blades. The pain is generally moſt violent when the patient draws in his breath.

The pulſe in this diſeaſe is commonly quick and hard, the urine high coloured, and if blood be let, it is covered with a tough cruſt, or buffy coat. The patient's

pittle is at firſt thin, but afterwards it becomes groſſer, nd is often ſtreaked with blood.

REGIMEN.——Nature generally endeavours to arry off this diſeaſe by a critical diſchargc of blood rom ſome part of the body, by expectoration, ſweat, ooſe ſtools, thick urine, or the like. We ought therefore to ſecond her intentions by leſſening the force of he circulation, relaxing the veſſels, diluting the humours, and promoting expectoration.

For theſe purpoſes, the diet, as in the former diſeaſe, ought to be cool, ſlender, and diluting. The patient muſt avoid all food that is viſcid, hard of digeſtion, or that affords much nouriſhment; as fleſh, butter, cheeſe, eggs, milk, and alſo every thing that is of a heating nature. His drink may be whey, or an infuſion of pectoral and balſamic vegetables *.

Barley-water, with a little honey or jelly of currants mixed with it, is likewiſe a very proper drink in this diſeaſe. It is made by boiling an ounce of pearl-barley in three Engliſh pints of water to two, which muſt afterwards be ſtrained. The decoction of figs, raiſins, barley, &c. recommended in the preceding diſeaſe, is here likewiſe very proper. Theſe and other diluting liquors are not to be drank in large quantities at a time; but the patient ought to keep continually ſupping them, ſo as to render his mouth and throat always moiſt. All his food and drink ſhould be taken a little warm.

The patient ſhould be kept quiet, cool, and every way eaſy, as directed under the foregoing diſeaſe. His feet and hands ought daily to be bathed in lukewarm water; and he may ſometimes ſit up in bed for a ſhort ſpace in order to relieve his head.

MEDICINE.——Almoſt every perſon knows, when a fever is attended with a violent pain in the ſide, and a quick hard pulſe, that bleeding is neceſſary. When theſe ſymptoms come on, the ſooner this operation is performed the better; and the quantity at firſt muſt be pretty large, provided the patient be able to

* See Appendix, *Pectoral infuſion.*

bear it. A large quantity of blood let at once, in the beginning of a pleurisy, has a much better effect than repeated small bleedings. A man may lose twelve or fourteen ounces of blood as soon as it is certainly known that he is seized with a pleurisy. For a younger person, or one of a delicate constitution, the quantity must be less.

If after the first bleeding, the stitch with the other violent symptoms, should still continue, it will be necessary, at the distance of twelve or eighteen hours, to let eight or nine ounces more. If the symptoms do not then abate, and the blood shews a strong buffy coat, a third or even a fourth bleeding may be requisite. If the pain of the side abate, the pulse become softer, or the patient begin to spit freely, bleeding ought not to be repeated. This operation is seldom necessary after the third or fourth day of the fever, and ought not then to be performed, unless in the most urgent circumstances.

The blood may be many ways attenuated without bleeding. There are likewise many things that may be done to ease the pain of the side without this operation, as fomenting, blistering, &c. Fomentations may be made by boiling a handful of flowers of elder, camomile, and common mallows, or any other soft vegetables in a proper quantity of water. The herbs may be either put into a flannel bag, and applied warm to the side, or flannels may be dipped in the decoction, afterwards wrung out, and applied to the part affected with as much warmth as the patient can easily bear. As the clothes grow cool, they must be changed, and great care taken that the patient do not catch cold. A bladder may be filled with warm milk and water and may be applied to the side, if the above method of fomenting be found inconvenient. Fomentations not only ease the pain, but relax the vessels, and prevent the stagnation of the blood and other humours. The side may likewise be frequently rubbed with a little of the volatile liniment *.

Topical bleeding has often a very good effect in this

‡ See Appendix, *Volatile liniment*.

diſeaſe. It may either be performed by applying a number of leeches to the part affected, or by cupping, which is both a more certain and expeditious method than the other.

Leaves of various plants might likewiſe be applied to the patient's ſide with advantage. I have often ſeen great benefit from young cabbage leaves applied warm to the ſize in a pleuriſy. Theſe not only relax the parts, but likewiſe draw off a little moiſture, and may prevent the neceſſity of bliſtering plaſters; which, however, when other things fail, muſt be applied.

If the ſtitch continue after repeated bleedings fomentation, &c. a bliſtering plaſter muſt be applied over the part affected, and ſuffered to remain for two days. This not only procures a diſcharge from the ſide, but takes off the ſpaſm, and by that means aſſiſts in removing the cauſe of the diſeaſe. To prevent a ſtrangury when the bliſtering plaſter is on, the patient may drink freely of the Arabic emulſion *.

If the patient is coſtive, a clyſter of thin water gruel, or barley water, in which a handful of mallows, or any other emollient vegetable, has been boiled, may be daily adminiſtered. This will not only empty the bowels, but have the effect of a warm fomentation applied to the inferior viſcera, which will help to make a derivation from the breaſt.

The expectoration may be promoted by ſharp, oily, and mucilaginous medicines. For this purpoſe, an ounce of the oxymel, or the vinegar of ſquills, may be added to ſix ounces of the pectoral decoction, and two table-ſpoonfuls of it taken every two hours,

Should the ſquill diſagree with the ſtomach, the oily emulſion may be adminiſtered †; or, in place of it, two ounces of the oil of ſweet almonds, or oil of olives, and two ounces of the ſyrup of violets, may be mixed with as much ſugar candy powdered as will make an electuary of the conſiſtence of honey. The patient may

* See Appendix, *Arabic Emulsion.*
† See Appendix, *Oily Emulsion.*

take a tea ſpoonful of this frequently, when the cough is troubleſome. Should oily medicines prove nauſeous, which is ſometimes the caſe, two table ſpoonfuls of the ſolution of gum ammoniac in barley water may be given three or four times a day *.

If the patient does not perſpire, but has a burning heat upon his ſkin, and paſſes very little water, ſome ſmall doſes of purified nitre and camphire will be of uſe. Two drams of the former may be rubbed with five or ſix grains of the latter in a mortar, and the whole divided into ſix doſes, one of which may be taken five or ſix hours, in a a little of the patient's ordinary drink.

We ſhall only mention one medicine more, which ſome reckon almoſt a ſpecific in the pleuriſy, viz. the decoction of the ſeneka rattle ſnake root †. After bleeding and other evacuations have been premiſed, the patient may take two, three, or four table ſpoonfuls of this decoction, according as his ſtomach will bear it, three or four times a day. If it ſhould occaſion vomiting, two or three ounces of ſimple cinnamon water may be mixed with the quantity of decoction here directed; or it may be taken in ſmaller doſes. As this medicine promotes perſpiration and urine, and likewiſe keeps the body eaſy, it may be of ſome ſervice in a pleuriſy, or or any other inflammation of the breaſt.

No one will imagine that theſe medicines are all to be uſed at the ſame time. We have mentioned different things, on purpoſe that people may have it in their power to chuſe; and likewiſe, that when one cannot be obtained, they may make uſe of another. Different medicines are no doubt neceſſary in the different periods of a diſorder; and where one fails of ſucceſs, or diſagrees with the patient, it will be proper to try another.

What is called the criſis, or height of the fever, is ſometimes attended with very alarming ſymptoms, as difficulty of breathing, an irregular pulſe, convulſive motions, &c. Theſe are apt to frighten the attend-

* See Appendix, *Solution of Gum Ammoniac.*
† See Appendix, *Decoction of Seneka Root.*

ants, and induce them to do improper things, as bleeding the patient, giving him ſtrong ſtimulating medicines, or the like. But they are only the ſtruggles of Nature to overcome the diſeaſe, in which ſhe ought to be aſſiſted by plenty of diluting drink, which is then peculiarly neceſſary. If the patient's ſtrength, however, be much exhauſted by the diſeaſe, it will be neceſſary at this time to ſuppport him with frequent ſmall draughts of wine whey, negus, or the like.

When the pain and fever are gone, it will be proper, after the patient has recovered ſufficient ſtrength, to give him ſome gentle purges, as thoſe directed towards the end of an acute continual fever. He ought likewiſe to uſe a light diet of eaſy digeſtion, and his drink ſhould be butter-milk, whey, and other things of a cleanſing nature.

Of the BASTARD PLEURISY.

That ſpecies of pleuriſy which is called the *baſtard* or *ſpurious*, generally goes off by keeping warm for a few days, drinking plenty of diluting liquors, and obſerving a cooling regimen.

It is known by a dry cough, a quick pulſe, and a difficulty of lying on the affected ſide; which laſt does not always happen in the true pleuriſy. Sometimes, indeed, this diſeaſe proves obſtinate, and requires bleeding, with cupping, and ſcarifications of the part affected. Theſe, together with the uſe of nitrous and other cooling medicines, ſeldom fail to affect a cure. The application of bliſters in this diſeaſe, has often proved fatal.

Of the PARAPHRENITIS.

The *paraphenitis*, or inflammation of the diaphragm, is ſo nearly connected with the pleuriſy, and reſembles it ſo much in the manner of treatment, that, it is ſcarcely neceſſary to conſider it as a ſeparate diſeaſe.

It is attended with a very acute fever, and an extreme pain in the part affected, which is generally augmented by coughing, ſneezing, drawing in the breath, taking food, going to ſtool, making water, &c. Hence

the patient breathes quick, and draws in his bowels to prevent the motion of the diaphragm; is reſtleſs, anxious, has a dry cough, a hiccup, and often a dilirium. A convulſive laugh, or rather a kind of involuntary grin, is no uncommon ſymptom of this diſeaſe.

Every method muſt be taken to prevent a ſuppuration, as it is impoſſible to ſave the patient's life when this happens. The regimen and medicine are in all reſpects the ſame as in the pleuriſy. We ſhall only add, that in this diſeaſe, emmollient clyſters are peculiarly uſeful, as they relax the bowels, and by that means make a derivation from the part affected.

CHAP. XVIII.

OF A PERIPNEUMONY, OR INFLAMMATION OF THE LUNGS.

AS this diſeaſe affects an organ which is abſolutely neceſſary to life, it muſt always be attended with danger. Perſons who abound with thick blood, whoſe fibres are tenſe and rigid, who feed upon groſs aliment, and drink ſtrong viſcid liquors, are moſt liable to a peripneumony. It it is generally fatal to thoſe who have a flat breaſt, or narrow cheſt, and to ſuch as are afflicted with an aſthma, eſpecially in the decline of life. Sometimes the inflammation reaches to one lobe of the lungs only, at other times the whole of the organ is affected; in which caſe the diſeaſe can hardly fail to prove fatal.

When the diſeaſe proceeds from a viſcid pituitous matter obſtructing the veſſels of the lungs, it is called ſpurious or baſtard peripneumony. When it ariſes from a thin acrid defluction on the lungs, it is denominated a catarrhal peripneumony, &c.

CAUSES—An inflammation of the lungs is ſometimes a primary diſeaſe, and ſometimes it is the conſequence of other diſeaſes, as a quinſey, a pleuriſy, &c. It proceeds from the ſame cauſes as the pleuriſy, viz. an

obſtructed perſpiration from cold, wet clothes, &c. or from an increaſed circulation of the blood by violent exerciſe, the uſe of ſpiceries, ardent ſpirits, and ſuch like. The pleuriſy and peripneumony are often complicated; in which caſe the diſeaſe is called a pleuro-peripneumony.

SYMPTOMS.——Moſt of the ſymptoms of a pleuriſy likewiſe attend an inflammation of the lungs; only in the latter the pulſe is more ſoft, and the pain leſs acute; but the difficulty of breathing, and oppreſſion of the breaſt, are generally greater.

REGIMEN.——As the regimen and medicine are in all reſpects the ſame in the true peripneumony as in the pleuriſy, we ſhall not here repeat them, but refer the reader to the treatment of that diſeaſe. It may not, however, be improper to add, that the aliment ought to be more tender and thin in this than in any other inflammatory diſeaſe. The learned Dr. Arbuthnot aſſerts, that even common whey is ſufficient to ſupport the patient, and that decoctions of barley, and infuſions of fennel roots in warm water with milk, are the moſt proper both for drink and nouriſhment. He likewiſe recommends the ſteam of warm water taken by the breath, which ſerves as a kind of internal fomentation, and helps to attenuate the impacted humours. If the patient has looſe ſtools, but is not weakened by them, they are not to be ſtopped, but rather promoted by the uſe of emollient clyſters.

It has already been obſerved, that the ſpurious or baſtard peripneumony is occaſioned by a viſcid pituitous matter obſtructing the veſſels of the lungs. It commonly attacks the old, infirm, and phlegmatic, in winter and wet ſeaſons.

The patient at the beginning is cold and hot by turns, has a ſmall quick pulſe, feels a ſenſe of weight upon his breaſt, breathes with difficulty, and ſometime complains of a pain and giddineſs of his head. His urine is uſually pale, and his colour very little changed.

The diet, in this as well as in the true peripneumony, muſt be very ſlender, as weak broths, ſharpened with the juice of orange or lemon, and ſuch like. His drink

may be thin water gruel ſweetened with honey, or a decoction of the roots of fennel, liquorice, and quick graſs. An ounce of each of theſe may be boiled in three Engliſh pints of water to a quart, and ſharpened with a little currant jelly or the like.

Bleeding and purging are generally proper at the beginning of this diſeaſe; but if the patient's ſpittle be pretty thick, or well concocted, neither of them are neceſſary. It will be ſufficient to aſſiſt the expectoration by ſome of the ſharp medicines recommended for that purpoſe in the pleuriſy, as the ſolution of gum ammoniac with oxymel of ſquills, &c. Bliſtering plaſters have generally a good effect, and ought to be applied pretty early.

If the patient do not ſpit, he muſt be bled, according as his ſtrength will permit, and have a gentle purge adminiſtered. Afterwards his body may be kept open by clyſters, and the expectoration promoted, by taking every four hours two table ſpoonfuls of the ſolution mentioned above.

When an inflammation of the breaſt does not yield to bleeding, bliſtering, and other evacuations, it commonly ends in a ſuppuration, is more or leſs dangerous, according to the part where it is ſituated. When this happens in the pleura, it ſometimes breaks outwardly, and the matter is diſcharged by the wound.

When the ſuppuration happens within the ſubſtance or body of the lungs, the matter may be diſcharged by expectoration; but if the matter floats in the cavity of the breaſt, between the pleura and the lungs, it can only be diſcharged by an inciſion made betwixt the ribs.

If the patient's ſtrength do not return after the inflammation is to all appearance removed; if his pulſe continue quick though ſoft, his breathing difficult and oppreſſed; if he have cold ſhiverings at times, his cheeks fluſhed, his lips dry; and if he complain of thirſt, and want of appetite, there is reaſon to fear a ſuppuration, and that a phthiſis or conſumption of the lungs will enſue. We ſhall therefore next proceed to conſider the proper treatment of that diſeaſe.

CHAP. XVIII.

OF CONSUMPTIONS.

A CONSUMPTION is a waſting or decay of the whole body, from an ulcer, tubercles, or concretion of the lungs, an empyema, a nervous atrophy, or cachexy.

Dr. Arbuthnot obſerves, that in his time conſumptions made up above one tenth part of the bills of mortality in and about London. There is reaſon to believe they have rather increaſed ſince; and we know from experience, that they are not leſs fatal in ſome other towns of England than in London.

Young perſons, between the age of fifteen and thirty, of a ſlender make, long neck, high ſhoulders, and flat breaſts, are moſt liable to this diſeaſe.

Conſumptions prevail more in England than in any other part of the world, owing perhaps to the great uſe of animal food and malt liquors, the general application to ſedentary employments, and the great quantity of pit coal which is there burnt; to which we may add, the perpetual changes in the atmoſphere, or variableneſs of the weather.

CAUSES.——It has already been obſerved, that an inflammation of the breaſt often ends in an impoſthume; conſequently whatever diſpoſes people to this diſeaſe, muſt likewiſe be conſidered as a cauſe of conſumption.

Other diſeaſes, by vitiating the habit, may likewiſe occaſion conſumptions; as the ſcurvy, the ſcrophula, or king's evil, the venereal diſeaſe, the aſthma, ſmallpox, meaſles, &c.

As this diſeaſe is ſeldom cured, we ſhall endeavour the more particularly to point out its cauſes, in order that people may be enabled to avoid it. Theſe are:

—— Confined or unwholeſome air; when this fluid is impregnated with the fumes of metals or minerals, it proves extremely hurtful to the lungs, and often corrodes the tender veſſels of that neceſſary organ.

—— Violent paſſions, exertions, or affections of the mind; as grief, diſappointment, anxiety, or cloſe application to the ſtudy of abtruſe arts or ſciences.

—— Great evacuations; as ſweating, diarrhoeas, diabetes, exceſſive venery, the fluor albus, an over diſcharge of the menſtrual flux, giving ſuck too long, &c.

—— The ſudden ſtoppage of cuſtomary evacuations; as the bleeding piles, ſweating of the feet, bleeding at the noſe, the menſes, iſſues, ulcers, or eruptions of any kind.

—— Injuries done to the lungs, calculi, &c. I lately ſaw the ſymptoms of a phthiſis occaſioned by a ſmall bone ſticking in the *bronchæ*. It was afterwards vomited along with a conſiderable quantity of purulent matter, and the patient, by a proper regimen, and the uſe of Peruvian bark, recovered.

—— Making a ſudden tranſition from a hot to a very cold climate, change of apparel, or whatever greatly leſſens the perſpiration.

—— Frequent and exceſſive debaucheries. Late watching and drinking ſtrong liquors, which generally go together, can hardly fail to deſtroy the lungs. Hence the *bon companion* generally falls a ſacrifice to this diſeaſe.

—— Infection. Conſumptions are likewiſe caught by ſleeping with the diſeaſed; for which reaſon this ſhould be carefully avoided. It cannot be of great benefit to the ſick, and muſt hurt thoſe in health.

—— Occupations in life. Thoſe artificers who ſit much, and are conſtantly leaning forward, or preſſing upon the ſtomach and breaſt, as cutlers, taylors, ſhoemakers, ſeamſtreſſes, &c. often die of conſumptions. They likewiſe prove fatal to ſingers, and all who have occaſion to make frequent and violent exertions of the lungs.

—— Cold. More conſumptive patients date the beginning of their diſorders from wet feet, damp beds, night air, wet clothes, or catching cold after the body had been heated, than from all other cauſes.

Sharp, ſaline, and aromatic aliments, which heat and

inflame the blood, are likewiſe frequently the cauſe of conſumptions.

We ſhall only add, that this diſeaſe is often owing to an hereditary taint or a ſcrophulous habit, in which caſe it is generally incurable.

SYMPTOMS.—This diſeaſe generally begins with a dry cough, which often continues for ſome months. If a diſpoſition to vomit after eating be excited by it, there is ſtill greater reaſon to fear an approaching conſumption. The patient complains of a more than uſual degree of heat, a pain and oppreſſion of the breaſt, eſpecially after motion; his ſpittle is of a ſaltiſh taſte, and ſometimes mixed with blood; he is apt to be ſad, his appetite is bad, and his thirſt is great. There is generally a quick, ſoft, ſmall pulſe, though ſometimes the pulſe is pretty full, and rather hard. Theſe are the common ſymptoms of a beginning conſumption.

Afterwards the patient begins to ſpit a greeniſh, white, or bloody matter. His body is extenuated by the hectic fever and colliquative ſweats, which mutually ſucceed one another, viz, the one towards night, and the other in the morning; a looſeneſs, and an exceſſive diſcharge of urine, are troubleſome ſymptoms at this time, and greatly weaken the patient. There is a burning heat in the palms of the hands, and the face generally flushes after eating; the fingers become remarkably ſmall, the nails are bent inwards, and the hairs fall off.

At laſt the ſwelling of the feet and legs, the total loſs of ſtrength, the ſinking of the eyes, the difficulty of ſwallowing, and the coldneſs of the extremities, ſhew the immediate approach of death, which, however, the patient ſeldom believes to be ſo near. Such is the uſual progreſs of this fatal diſeaſe, which, if not early checked, commonly ſets all medicine at defiance.

REGIMEN.—On the firſt appearance of a conſumption, if the patient live in a large town, or any place where the air is confined, he ought immediately to quit it, and to make choice of a ſituation in the country, where the air is pure and free. Here he muſt not re-

main inactive, but take every day as much exercise as he can bear.

The best method of taking exercise is to ride on horseback, as this gives the body a great deal of motion, without much fatigue. Such as cannot bear this kind of exercise, must make use of a carriage. A long journey, as it amuses the mind by a continual change of objects, is greatly preferable to riding the same ground over and over. Care, however, must be taken to avoid catching cold from wet clothes, damp beds, or the like. The patient ought always to finish his ride in the morning, or at least before dinner; otherwise it will oftener do harm than good.

It is pity those who attend the sick seldom recommend riding in this disease, till the patient is either unable to bear it, or the malady has become incurable. Patients are likewise apt to trifle with every thing that is in their own power. They cannot see how one of the common actions of life should prove a remedy in an obstinate disease, and therefore they reject it, while they greedily hunt after relief from medicine, merely because they do not understand it.

Those who have strength and courage to undertake a pretty long voyage, may expect great advantage from it. This, to my knowledge, has frequently cured a consumption after the patient was, to all appearance, far advanced in that disease, and where medicine had proved ineffectual. Hence it is reasonable to conclude, that if a voyage were undertaken in due time, it would seldom fail to perform a cure *.

Such as try this method of cure ought to carry as much fresh provisions along with them as will serve for the whole time they are at sea;—as milk is not easily obtained in this situation, they ought to live

* Two things chiefly operate to prevent the benefit which would arise from sailing. The one is, that physicians seldom order it till the disease is too far advanced; and the other is, that they seldom order a voyage of a sufficient length. A patient may receive no benefit by crossing the Channel, who, should he cross the Atlantic, might be completely cured. Indeed, we have reason to believe that a voyage of this kind, if taken in due time, would seldom fail to cure a consumption.

upon fruits, and the broth of chickens, or other young animals, which can be kept alive on board. It is ſcarcely neceſſary to add, that ſuch voyages ſhould be undertaken, if poſſible, in the mildeſt ſeaſon, and that they ought to be towards a warmer climate †.

Thoſe who have not courage for a long voyage may travel into a more ſouthern climate, as the ſouth of France, Spain, or Portugal: and if they find the air of theſe countries agree with them, they ſhould continue there at leaſt till their health be confirmed.

Next to proper air and exerciſe, we would recommend a due attention to diet. The patient ſhould eat nothing that is either heating or hard of digeſtion, and his drink muſt be of a ſoft and cooling nature. All the diet ought to be calculated to leſſen the acrimony of the humours, and to nouriſh and ſupport the patient. For this purpoſe he muſt keep chiefly to the uſe of vegetables and milk. Milk alone is of more value in this diſeaſe than the whole materia medica.

Aſſes' milk is commonly reckoned preferable to any other, but it cannot always be obtained; beſides, it is generally taken in a very ſmall quantity; whereas, to produce any effects, it ought to make a conſiderable part of the patient's diet. It is hardly to be expected that a gill or two of aſſes' milk, drank in the ſpace of twenty-four hours ſhould be able to produce any conſiderable change in the humours of an adult; and when people do not perceive its effects ſoon, they loſe hope, and ſo leave it off. Hence it happens, that this medicine, however valuable, very ſeldom performs a cure. The reaſon is obvious; it is commonly uſed too late, is taken in too ſmall quantities, and is not duly perſiſted in.

I have known very extraordinary effects from aſſes' milk in obſtinate coughs, which threatened a conſumption of the lungs, and do verily believe, if uſed at this period, that it would ſeldom fail; but if it be delayed

† Though I do not remember to have ſeen one inſtance of a genuine conſumption of the lungs cured by medicine, yet I have known a Weſt India voyage work wonders in that diſorder.

till an ulcer is formed, which is generally the caſe, how can it be expected to ſucceed?

Aſſes' milk ought to be drank, if poſſible, in its natural warmth, and by a grown perſon in the quantity of half an Engliſh pint at a time. Inſtead of taking this quantity night and morning only, the patient ought to take it four times, or at leaſt thrice a day, and to eat a little light bread along with it, ſo as to make it a kind of meal.

If the milk ſhould happen to purge, it may be mixed with old conſerve of roſes. When that cannot be obtained, the powder of crabs' claws may be uſed in its ſtead. Aſſes' milk is uſually ordered to be drank warm, in bed; but as it generally throws the patient in a ſweat when taken in this way, it would perhaps be better to give it after he riſes.

Some extraordinary cures in conſumptive caſes have been performed by women's milk. Could this be obtained in ſufficient quantity, we would recommend it in preference to any other. It is better if the patient can ſuck it from the breaſt, than to drink it afterwards. I knew a man who was reduced to ſuch a degree of weakneſs in a conſumption, as not to be able to turn himſelf in bed. His wife was at that time giving ſuck, and the child happening to die, he ſucked her breaſts, not with a view to reap any advantage from the milk, but to make her eaſy. Finding, himſelf, however, greatly benefitted by it, he continued to ſuck her till he became perfectly well, and is at preſent a ſtrong and healthy man.

Some prefer butter milk to any other, and it is indeed a very valuable medicine, if the ſtomach be able to bear it. It does not agree with every perſon at firſt, and is therefore often laid aſide without a ſufficient trial. It ſhould at firſt be taken ſparingly, and the quantity gradually increaſed till it becomes to be almoſt the ſole food. I never knew it ſucceed, unleſs where the patient almoſt lived upon it.

Cow's milk is moſt readily obtained of any, and through it be not ſo eaſy digeſted as that of aſſes or

mores, it may be rendered lighter, by adding to it an equal quantity of barley water, or allowing it to ſtand for ſome hours, and afterwards taking off the cream. If it ſhould, notwithſtanding, prove heavy to the ſtomach, a ſmall quantity of brandy or rum, with a little ſugar, may be added, which will render it both more light and nouriſhing.

It is not to be wondered, that milk ſhould for ſome time diſagree with a ſtomach that has not been accuſtomed to digeſt any thing but fleſh and ſtrong liquors, which is the caſe with many of thoſe who fall into conſumptions. We do not, however, adviſe thoſe who have been accuſtomed to animal food and ſtrong liquors, to leave them off all at once. This might be dangerous. It will be neceſſary for ſuch to eat a little once a-day of the fleſh of ſome young animal, or rather to uſe the broth made of chickens, veal, lamb, or the like. They ought likewiſe to drink a little wine made into negus, or diluted with twice or thrice its quantity of water, and to make it gradually weaker till they can leave it off altogether.

Theſe muſt be uſed only as preparative to a diet conſiſting chiefly of milk and vegetables, which the ſooner the patient can be brought to bear, the better. Rice and milk, or barley and milk, boiled with a little ſugar, is very proper food. Ripe fruits, roaſted, baked, or boiled, are likewiſe proper, as gooſe or currant berry tarts, apples roaſted, or boiled in milk, &c. The jellies, conſerves, and preſerves, &c. of ripe ſubacid fruits ought to be eaten plentifully, as the jelly of currants, conſerve of roſes, preſerved plums, cherries, &c.

Wholeſome air, proper exerciſe, and a diet conſiſting chiefly of theſe and other vegetables, with milk, is the only courſe that can be depended upon in a beginning conſumption. If the patient has ſtrength and a ſufficient reſolution to perſiſt in this courſe, he will be ſeldom diſappointed of a cure.

In a populous town in England‡, where conſump-

‡ Sheffield.

tions are very common, I have frequently ſeen conſumptive patients, who had been ſent to the country with orders to ride and live upon milk and vegetables, return in a few months quite plump, and free from any complaint. This indeed was not always the caſe, eſpecially when the diſeaſe was hereditary, or far advanced; but it was the only method in which ſucceſs was to be expected; where it failed, I never knew medicine ſucceed.

If the patient's ſtrength and ſpirits flag, he muſt be ſupported with ſtrong broths, jellies, and ſuch like. Some recommend ſhell fiſh in this diſorder, and with ſome reaſon, as they are nouriſhing and reſtorative *. All the food and drink, however, ought to be taken in ſmall quantities, leſt an overcharge of freſh chyle ſhould oppreſs the lungs, and too much accelerate the circulation of the blood.

The patient's mind ſhould be kept as eaſy and cheerful as poſſible. Conſumptions are often occaſioned, and always aggravated, by a melancholy caſt of mind; for which reaſon muſic, cheerful company, and every thing that inſpires mirth, are highly beneficial. The patient ought ſeldom to be left alone, as brooding over his calamities is ſure to render him worſe.

MEDICINE.—Though the cure of this diſeaſe depends chiefly upon regimen and the patient's own endeavours, yet we ſhall mention a few things which may be of ſervice in relieving ſome of the more violent ſymptoms.

In the firſt ſtage of a conſumption, the cough may ſometimes be appeaſed by bleeding; and the expectoration may be promoted by the following medicines:—Take freſh ſquills, gum ammoniac, and powdered cardamom ſeeds, of each a quarter of an ounce; beat them together in a mortar, and if the maſs prove too hard for pills, a little of any kind of ſyrup may be added to it. This may be formed into pills of a moderate ſize, and

* I have often known persons of a consumptive habit, where the symptoms were not violent, reap great benefit from the use of oysters. They generally eat them raw, and drink the juice along with them.

our or five of them taken twice or thrice a day, according as the patient's ſtomach will bear them.

The lac ammoniacum, or milk of gum ammoniac, as it is called, is likewiſe a proper medicine in this ſtage of the diſeaſe. It may be uſed as directed in the pleuriſy.

A mixture made of equal parts of lemon juice, fine honey, and ſyrup of poppies, may likewiſe be uſed. Four ounces of each of theſe may be ſimmered together in a ſauce pan over a gentle fire, and a table ſpoonful of it taken at any time when the cough is troublesome.

It is common in this ſtage of the diſeaſe to load the patient's ſtomach with oily and balſamic medicines. Theſe, inſtead of removing the cauſe of the diſeaſe, tend rather to increaſe it by heating the blood, while they pall the appetite, relax the ſolids, and prove every way hurtful to the patient. Whatever is uſed for removing the cough, beſides riding and other proper regimen, ought to be medicines of a ſharp and cleanſing nature, as oxymel, ſyrup of lemon, &c.

Acids ſeem to have peculiarly good effects in this diſeaſe; they both tend to quench the patient's thirſt and to cool the blood. The vegetable acids, as apples, oranges, lemons, &c. appear to be the moſt proper. I have known patient's ſuck the juice of ſeveral lemons every day with manifeſt advantage, and would for this reaſon recommend acid vegetables to be taken in as great quantity as the ſtomach will bear them.

For the patient's drink we would recommend infuſions of the bitter plants, as ground ivy, the leſſer centaury, camomile flowers, or water trefoil. Theſe infuſions may be drank at pleaſure. They ſtrengthen the ſtomach, promote digeſtion, &c. rectify the blood, and at the ſame time anſwer all the purpoſes of dilution, and quench the thirſt much better than things that are luſcious or ſweet. But if the patient ſpit blood, he ought to uſe for his ordinary drink infuſions or decoctions of the vulnerary roots, plants, &c ‡.

‡ See Appendix, *Volatile Decoction.*

There are many other mucilaginous plants and ſeeds, of a healing and agglutinating nature, from which infuſions and decoctions may be prepared with the ſame intention; as the orcheſs, the quince ſeed, coltsfoot, linſeed, ſarſaparilla, &c. It is not neceſſary to mention the different ways in which theſe may be prepared. Simple infuſion or boiling is all that is neceſſary, and the doſe may be at diſcretion.

The conſerve of roſes is here peculiarly proper. It may either be put into the decoction above preſcribed, or eaten by itſelf. No benefit is to be expected from trifling doſes of this medicine. I never knew it of any ſervice, unleſs where three or four ounces at leaſt were uſed daily for a conſiderable time. In this way I have ſeen it produce very happy effects, and would recommend it wherever there is a diſcharge of blood from the lungs.

When the ſpitting up of groſs matter, oppreſſion of the breaſt, and the hectic ſymptoms, ſhew that an impoſthume is formed in the lungs, we would recommend the Peruvian bark, that being the only drug which has any chance to counteract the general tendency which the humours then have to putrefaction.

An ounce of the bark in powder may be divided into eighteen or twenty doſes, of which one may be taken every three hours through the day in a little ſyrup, or a cup of horehound tea.

If the bark ſhould happen to purge, it may be made into an electuary, with the conſerve of roſes, thus—Take old conſerve of roſes, a quarter of a pound; Peruvian bark, half an ounce; ſyrup of orange or lemon, as much as will make it of the conſiſtence of honey. This quantity will ſerve the patient four or five days, and may be repeated as there is occaſion.

Such as cannot take the bark in ſubſtance may infuſe it in cold water. This ſeems to be the beſt menſtruum for extracting the virtues of that drug. Half an ounce of bark in powder may be infuſed for twenty four hours in half an Engliſh pint of water. Afterwards let it be paſſed through a fine ſtrainer, and an ordinary tea cupful of it taken three or four times a-day.

We would not recommend the bark while there are any ſymptoms of an inflammation of the breaſt; but when it is certainly known that matter is collecting there, it is one of the beſt medicines which can be uſed. Few patients, indeed, have reſolution enough to give the bark a fair trial at this period of the diſeaſe, otherwiſe we have reaſon to believe that ſome benefit might be reaped from it.

When it is evident that there is an impoſthume in the breaſt, and the matter can neither be ſpit up nor carried off by abſorption, the patient muſt endeavour to make it break inwardly, by drawing in the ſteams of warm water or vinegar with his breath, coughing, laughing, or bawling aloud, &c. When it happens to burſt within the lungs, the matter may be diſcharged by the mouth. Sometimes indeed the burſting of the vomica occaſions immediate death, by ſuffocating the patient. When the quantity of matter is great, and the patient's ſtrength exhauſted, this is commonly the caſe. At any rate, the patient is ready to fall into a ſwoon, and ſhould have volatile ſalts or ſpirits held to his noſe.

If the matter diſcharged be thick, and the cough and breathing become eaſier, there may be ſome hopes of a cure. The diet at this time ought to be light, but reſtorative, as chicken broths, ſago gruel, rice milk, &c. the drink butter milk or whey, ſweetened with honey. This is likewiſe the proper time for uſing the Peruvian bark, which may be taken as directed above.

If the vomica or impoſthume ſhould diſcharge itſelf into the cavity of the breaſt, between the pleura and the lungs, there is no way of getting the matter out, but by an inciſion, as has already been obſerved. As this operation muſt always be performed by a ſurgeon, it is not neceſſary here to deſcribe it. We ſhall only add, that it is not ſo dreadful as people are apt to imagine, and that it is the only chance the patient in this caſe has for his life.

A NERVOUS CONSUMPTION, is a waſting or

decay of the whole body, without any conſiderable degree of fever, cough, or difficulty of breathing. It is attended with indigeſtion, weakneſs, want of appetite, &c.

Thoſe who are of a fretful temper, who indulge in ſpirituous liquors, or who breathe an unwholeſome air, are moſt liable to this diſeaſe.

We would chiefly recommend for the cure of a nervous conſumption, a light and nouriſhing diet, plenty of exerciſe in a free open air, and the uſe of ſuch bitters as brace and ſtrengthen the ſtomach; as the Peruvian bark, gentian root, camomile, horehound, &c. Theſe may be infuſed in water or wine, and a glaſs of it drank frequently.

It will greatly aſſiſt the digeſtion, and promote the cure of this diſeaſe, to take twice a-day twenty or thirty drops of the elixir of vitriol in a glaſs of wine or water. The chalybeate wine is likewiſe an excellent medicine in this caſe. It ſtrengthens the ſolids, and powerfully aſſiſts nature in the preparation of good blood †.

Agreeable amuſements, cheerful company, and riding about, are however preferable to all medicines in this diſeaſe. For which reaſon, when the patient can afford it, we would recommend a long journey of pleaſure, as the moſt likely means to reſtore his health.

What is called a *ſymptomatic conſumption*, cannot be cured without firſt removing the diſeaſe by which it is occaſioned. Thus, when a conſumption proceeds from the ſcrophula, or king's evil, from the ſcurvy, the aſthma, the venereal diſeaſe, &c. a due attention muſt be paid to the malady from whence it ariſes, and the regimen and medicine directed accordingly.

When *excessive evacuations* of any kind occaſion a conſumption, they muſt not only be reſtrained, but the patient's ſtrength muſt be reſtored by gentle exerciſe, nouriſhing diet, and generous cordials. Young and de-

† See Appendix, *Chalybeate wine.*

licate mothers often fall into conſumptions, by giving ſuck too long. As ſoon as they perceive their ſtrength and appetite begin to fail, they ought immediately to wean the child, or provide another nurſe, otherwiſe they cannot expect a cure.

Before we quit this ſubject we would earneſtly recommend it to all, as they wiſh to avoid conſumptions, to take as much exerciſe without doors as they can, to avoid unwholeſome air, and to ſtudy ſobriety. Conſumptions owe their preſent increaſe not a little to the faſhion of ſitting up late, eating hot ſuppers, and ſpending every evening over a bowl of hot punch or other ſtrong liquors. Theſe liquors, when too freely uſed, not only hurt the digeſtion and ſpoil the appetite, but heat and inflame the blood, and ſet the whole conſtitution on fire.

It has already been obſerved, conſumptions, in the time of Dr. Arbuthnot made one tenth part of the bills of mortality, and it is probable the proportion is now conſiderably increaſed from the effeminate education and enervating mode of the phyſical treatment of children, which produces a delicacy of habit pregnant with this diſorder.

Conſumption hardly admits of a cure, unleſs taken very early; yet here, as in other diſeaſes, the empyric announces his infallible powders or potions. The patient ſwallows them, and imagines himſelf better. The quack announces in every newspaper, and innumerable handbills, the complete cure he has performed, and the ignorant part of the world, ever ready to be impoſed upon, believe in the efficacy of the noſtrum, and die in the conſtant hope and belief of a ſpeedy recovery.

In fact, when a conſumption becomes deeply ſeated, it will baffle the efforts of the beſt phyſicians. The beſt advice we can give, is to be careful to avoid it, by guarding againſt catching cold, which is too frequently its precurſor and immediate cauſe.

CHAP. XIX.

OF THE SLOW OR NERVOUS FEVER.

NERVOUS fevers have increaſed greatly of late years in this island, owing doubtleſs to our different manner of living, and the increaſe of ſedentary employments, as they commonly attack perſons of a weak relaxed habit, or indulge in ſpirituous liquors.

CAUSES.—Nervous fevers may be occaſioned by whatever depreſſes the ſpirits, or impoveriſhes the blood; as grief, fear, anxiety, want of ſleep, intenſe thought, living on poor watery diet, as unripe fruits, cucumbers, melons, muſhrooms, &c. They may likewiſe be occaſioned by damp, confined, or unwholeſome air. Hence they are very common in rainy ſeaſons, and prove moſt fatal to thoſe who live in dirty low houſes, crowded ſtreets, hoſpitals, jails, or ſuch like places.

Perſons whoſe conſtitutions have been broken by exceſſive venery, frequent ſalivations, too free an uſe of purgative medicines, or any other exceſſive evacuations, are moſt liable to this diſeaſe.

Keeping on wet clothes, lying on the damp ground, exceſſive fatigue, and whatever obſtructs the perſpiration, or cauſes a ſpaſmodic ſtricture of the ſolids, may likewiſe occaſion nervous fevers. We ſhall only add, frequent and great irregularities in diet. Too great abſtinence, as well as exceſs, is hurtful. Nothing tends ſo much to preſerve the body in a ſound ſtate, as a regular diet; nor can any thing contribute more to occaſion fevers of the worſt kind, than its oppoſite.

SYMPTOMS.——Low ſpirits, want of appetite, weakneſs, wearineſs after motion, watchfulneſs, deep ſighing, and dejection of mind, are generaliy the forerunners of this diſeaſe. They are ſucceeded by a quick low pulſe, a dry tongue without any conſiderable thirſt, chillineſs and flushing in turns, &c.

After ſome time, the patient complains of a giddineſs d pain of the head, has a nauſea, with reachings and omiting; the pulſe is quick, and ſometimes intermitng; the urine pale, reſembling dead ſmall beer, and e breathing is difficult, with oppreſſion of the breaſt, d ſlight alienations of mind.

If towards the ninth, tenth, or twelfth day, the ugue becomes more moiſt, with a plentiful ſpitting, a ntle purging, or a moiſture upon the ſkin; or if a ppuration happen in one or both ears, or large puſles break out about the lips and the noſe, there is reaon to hope for a favourable criſis.

But, if there be an exceſſive looſeneſs, or waſting veats, with frequent fainting fits, if the tongue, when ut out, trembles exceſſively, and the extremities feel old, with a fluttering or low creeping pulſe, if there e a ſtarting of the tendons, an almoſt total loſs of ight and hearing, and an involuntary diſcharge by ſtool nd urine, there is great reaſon to fear that death is aproaching.

REGIMEN.—It is very neceſſary in this diſeaſe to keep the patient cool and quiet; the leaſt motion would atigue him, and will be apt to occaſion wearineſs, and ven faintings; his mind ought not only to be kept aſy, but ſoothed and comforted with the hopes of a ſpeedy recovery. Nothing is more hurtful in low fevers of this kind, than preſenting to the patient's imagination gloomy or frightful ideas. Theſe of themſelves often occaſion nervous fevers, and it is not to be doubted but they will likewiſe aggravate them.

The patient muſt not be kept too low; his ſtrength and ſpirits ought to be ſupported by nouriſhing diet, and generous cordials. For this purpoſe his gruel, panada, or whatever food he takes, muſt be mixed with wine according as the ſymptoms may require. Pretty ſtrong wine whey, or ſmall negus ſharpened with the juice of orange or lemon, will be proper for his ordinary drink. Mullard whey is likewiſe a very proper drink in this fever, and may be rendered an excellent cordial

medicine by the addition of a proper quantity of white wine *.

Wine in this diſeaſe, if it could be obtained genuine, is almoſt the only medicine that would be neceſſary. Good wine poſſeſſes all the virtues of the cordial medicines, while it is free from many of their bad qualities. I ſay good wine—for however common this article of luxury is now become, it is rarely to be obtained genuine, eſpecially by the poor, who are obliged to purchaſe it in ſmall quantities.

I have often ſeen patients in low nervous fevers, where the pulſe could hardly be felt, with a conſtant delirium, coldneſs of the extremities, and almoſt every other mortal ſymptom, recover by uſing, in whey, gruel, and negus, a bottle or two of ſtrong wine every day. Good old ſound claret is the beſt, and may be made into negus, or given by itſelf, as circumſtances require.

In a word, the great aim in this diſeaſe is to ſupport the patient's ſtrength, by giving him frequently ſmall quantities of the above, or other drinks of a warm and cordial nature; he is not however to be overheated either with liquor or clothes, and his food ought to be light, and given in ſmall quantities.

MEDICINE.—Where a nauſea, load, and ſickneſs at the ſtomach prevail at the beginning of the fever, it will be neceſſary to give the patient a gentle vomit. Fifteen or twenty grains of ipecacuanha in fine powder, or a few ſpoonfuls of the vomiting julep †, will generally anſwer this purpoſe very well. This may be repeated any time before the third or fourth day, if the above ſymptoms continue. Vomits not only clean the ſtomach, but by the gentle ſhock which they give, promote the perſpiration, and have many other excellent effects in ſlow fevers, where there are no ſigns of inflammation, and nature wants rouſing.

Such as dare not venture upon a vomit, may clean the bowels by a ſmall doſe of Turkey rhubarb, or an infuſion of ſenna and manna.

* See Appendix, *Muſtard whey.* † See Appendix, *Vomiting julep.*

n all fevers, the great point is to regulate the ſymp-
s, ſo as to prevent them from going to either ex-
ne. This, in fevers of the inflammatory kind, where
force of the circulation is too great, or the blood
ſe and the fibres too rigid, bleeding and other eva-
tions are neceſſary. But in nervous fevers, where
are flags, where the blood is vapid and poor, and
ſolids relaxed, the lancet muſt be ſpared, and wine,
h other cordials, plentifully adminiſtered.

t is the more neceſſary to caution people againſt
eding in this diſeaſe, as there is generally at the be-
ning an univerſal ſtricture upon the veſſels, and
metimes an oppreſſion and difficulty of breathing,
ich ſuggeſt the idea of a plethora, or too great quan-
of blood. I have known even ſome of the faculty
eived by their own feelings in this reſpect ſo far as
ntiſt upon being bled, when it was evident from the
ſequences that the operation was improper.

Though bleeding is generally improper in this diſ-
, yet bliſtering is highly neceſſary. Bliſtering plaſ-
; may be applied at all times of the fever with great
antage. If the patient is delirious he ought to be
tered on the neck or head, and it will be the ſafeſt
rſe, when the inſenſibility continues, as ſoon as the
harge occaſioned by one bliſtering plaſter abates, to
ly another to ſome other part of the body, and by
means keep up a continual ſucceſſion of them till
e out of danger.

have been more ſenſible of the advantage of bliſter-
in this than in any other diſeaſe. Bliſtering plaſters
only ſtimulate the ſolids to action, but likewiſe oc-
on a continual diſcharge, which may in ſome mea-
ſupply the want of critical evacuations, which ſel-
happen in this kind of fever. They are moſt pro-
however either towards the beginning, or after
e degree of ſtupor has come on; in which laſt caſe
ill always be proper to bliſter the head.

f the patient is coſtive through the courſe of the diſ-
, it will be neceſſary to procure a ſtool, by giving
every other day a clyſter of milk and water, with

a little ſugar, to which may be added a ſpoonful of common ſalt, if the above does not operate.

Should a violent looſeneſs come on, it may be checked by ſmall quantities of Venice treacle, or giving the patient for his ordinary drink the white decoction †.

A miliary eruption ſometimes breaks out about the ninth or tenth day; as eruptions are often critical, great care ſhould be taken not to retard Nature's operation in this particular. The eruption ought neither to be checked by bleeding nor other evacuations, nor puſhed out by a hot regimen; but the patient ſhould be ſupported by gentle cordials, as wine whey, ſmall negus, ſago gruel with a little wine in it, and ſuch like. He ought not to be kept too warm, yet a kindly breathing ſweat ſhould by no means be checked.

Though bliſtering and the uſe of cordial liquors are the chief things to be depended upon in this kind of fever; yet for thoſe who may chooſe to uſe them, we ſhall mention one or two of the forms of medicine which are commonly preſcribed in it §.

In deſperate caſes, where the hiccup and ſtarting of the tendons have already come on, we have ſometimes ſeen extraordinary effects from large doſes of musk frequently repeated. Musk is doubtleſs an antiſpaſmodic, and may be given to the quantity of a ſcruple three or four times a-day, or oftener if neceſſary. Sometimes it may be proper to add to the musk a few grains of camphire and ſalt of hartſhorn, as theſe tend to promote perſpiration and the diſcharge of urine. Thus, fifteen grains of musk, with three grains of camphire, and ſix grains of ſalt of hartſhorn, may be made into a bolus with a little ſyrup, and given as above.

† See Appendix, *White Decoction*.

§ When the patient is low, ten grains of Virginian snake root, and the same quantity of contrayerva root, with five grains of Russian castor, all in fine powder, may be made into a bolus with a little of the cordial confection or syrup of saffron. One of these may be taken every four or five hours.

The following powder may be used with the same intention—Take wild Valerian root in powder, one scruple, saffron and castor each four grains; mix these by rubbing them together in a mortar, and give one in a cup of wine whey, three or four times a day.

If the fever ſhould happen to intermit, which it frequently does towards the decline, or if the patient's ſtrength ſhould be waſted with colliquative ſweats, &c. it will be neceſſary to give him the Peruvian bark. Half a drachm, or a whole drachm if the ſtomach will bear it, of the bark in fine powder, may be given four or five times a day in a glaſs of red port or claret. Should the bark in ſubſtance not ſit eaſy on the ſtomach, an ounce of it in powder may be infuſed in a bottle of Lisbon or Rheniſh wine for two or three days, afterwards it may be ſtrained, and a glaſs of it taken frequently †.

Some give the bark in this and other fevers, where there are no ſymptoms of inflammation, without any regard to the remiſſion or intermiſſion of the fever. How far future obſervations may tend to eſtabliſh this practice we will not pretend to ſay; but we have reaſon to believe that the bark is a very univerſal febrifuge, and that it may be adminiſtered with advantage in moſt fevers, where bleeding is not neceſſary, or where there are no ſymptoms of topical inflammation.

The nervous fever requires the moſt particular attention. The patient will certainly ſink, even under the moſt favourable appearances, unleſs he is ſupported by cordial and ſtimulating medicine.

In all ſtages, and even the every extremity of this diſorder, the caſe of the patient ſhould be unabated, it being at all times ſubject to the moſt ſudden alterations to the better, as well as to the worſe. A bottle, or even two, of generous wine, given in the courſe of twenty-four hours, to a perſon apparently beyond every hope, has produced the moſt favourable change, and the patient recovered.

† The bark may likewise be very properly administered, along with other cordials, in the following manner—Take an ounce of Peruvian bark, orange peel, half an ounce, Virginian snake root two drachms, saffron one drachm. Let all of them be powdered, and infused in an English pint of the best brandy for three or four days. Afterwards the liquor may be strained, and two tea spoonfuls of it given three or four times a day in a glass of small wine or negus. I now generally administer Huxham's tincture.

CHAP. XX.

OF THE MALIGNANT, PUTRID, OR SPOTTED FEVER.

THIS may be called the Peſtilential Fever of Europe, as in many of its ſymptoms it bears a great reſemblance to that dreadful diſeaſe the plague. Perſons of a lax habit, a melancholy diſpoſition, and thoſe whoſe vigour has been waſted by long faſting, watching, hard labour, exceſſive venery, frequent ſalivations, &c. are moſt liable to it.

CAUSES.——This fever is occaſioned by foul air, from a number of people being confined in a narrow place, not properly ventilated; from putrid animal and vegetable effluvia, &c. Hence it prevails in camps, jails, hoſpitals, and infirmaries, eſpecially where ſuch places are too much crowded, and cleanlineſs is neglected.

A cloſe conſtitution of the air, with long rainy or foggy weather, likewiſe occaſions putrid fevers. They often ſucceed great inundations in low and marſhy countries, eſpecially when theſe are preceded or followed by a hot and ſultry ſeaſon.

Living too much upon animal food, without a proper mixture of vegetables, or eating fiſh or fleſh that has been kept too long, are likewiſe apt to occaſion this kind of fever. Hence ſailors on long voyages, and the inhabitants of beſieged cities, are very often viſited with putrid fevers.

Corn that has been greatly damaged by rainy ſeaſons, or long keeping, and water that has become putrid by ſtagnation, &c. may likewiſe occaſion this fever.

Dead carcaſes tainting the air, eſpecially in hot ſeaſons, are very apt to occaſion putrid diſeaſes. Hence this kind of fever often prevails in countries which are the ſcenes of war and bloodſhed. This ſhews the propriety of removing burying grounds, ſlaughter houſes, &c. at a proper diſtance from great towns.

Want of cleanlineſs is a very general cauſe of putrid fevers. Hence they prevail among the poor inhabitants of large towns, who breathe a confined unwholeſome air, and neglect cleanlineſs. Such mechanics as carry on dirty employments, and are conſtantly confined within doors, are likewiſe very liable to this diſeaſe.

We ſhall only add, that putrid malignant, or ſpotted fevers, are highly infectious, and are therefore often communicated by contagion. For which reaſon, all perſons ought to keep at a diſtance from thoſe affected with ſuch diſeaſes, unleſs their attendance is abſolutely neceſſary.

SYMPTOMS.—The malignant fever is generally preceded by a remarkable weakneſs or loſs of ſtrength, without any apparent cauſe. This is ſometimes ſo great that the patient can ſcarce walk, or even ſit upright without being in danger of fainting away. His mind to is greatly dejected; he ſighs, and is full of dreadful apprehenſions.

There is a nauſea, and ſometimes a vomiting of bile, a violent pain of the head, with a ſtrong pulſation or throbbing of the temporal arteries; the eyes often appear red and inflamed, with a pain at the bottom of the orbit; there is a noiſe in the ears, the breathing is laborious, and often interrupted with a ſigh; the patient complains of a pain about the region of the ſtomach, and in his back and loins; his tongue is at firſt white, but afterwards it appears black and chapped; and his teeth are covered with a black cruſt. He ſometimes paſſes worms both upwards and downwards, is affected with tremors or ſhaking, and often becomes delirious.

If blood is let, it appears diſſolved, or with a very ſmall degree of coheſion, and ſoon becomes putrid; the ſtools ſmell extremely fœtid, and are ſometimes of a greeniſh, black, or reddiſh caſt. Spots of a pale, purple, dun, or black colour, often appear upon the ſkin, and ſometimes there are violent hæmorrhages or diſcharges of blood from the mouth, eyes, noſe, &c.

Putrid fevers may be diſtinguiſhed from the inflam-

matory, by the ſmallneſs of the pulſe, the great dejection of mind, the diſſolved ſtate of the blood, the petechiæ or purple ſpots, and the putrid ſmell of the excrements. They may likewiſe be diſtinguiſhed from the low or nervous fever, by the heat and thirſt being greater, the urine of a higher colour, and the loſs of ſtrength, dejection of mind, and all the other ſymptoms, more violent.

It ſometimes happens, however, that the inflammatory, nervous, and putrid ſymptoms are ſo blended together, as to render it very difficult to determine to which claſs the fever belongs. In this caſe, the greateſt caution and skill are requiſite. Attention muſt be paid to thoſe ſymptoms which are moſt prevalent, and both the regimen and medicines adapted to them.

Inflammatory and nervous fevers may be converted into malignant and putrid, by too hot a regimen, or improper medicines.

The duration of putrid fevers is extremely uncertain; ſometimes they terminate between the ſeventh and fourteenth day, and at other times they are prolonged for five or ſix weeks. The duration depends greatly upon the conſtitution of the patient, and the manner of treating the diſeaſe.

The moſt favourable ſymptoms are, a gentle looſeneſs after the fourth or fifth day, with a warm mild ſweat. Theſe, when continued for a conſiderable time, often carry off the fever, and ſhould never be imprudently ſtopped. Small miliary puſtules appearing between the petechiæ or purple ſpots, are likewiſe favourable, as alſo hot ſcabby eruptions about the mouth and noſe. It is a good ſign when the pulſe riſes upon the uſe of wine or other cordials, and the nervous ſymptoms abate; deafneſs coming on towards the decline of the fever, is likewiſe alſo a favourable ſymptom *, as are abſceſſes in the groin, or parotid glands.

Among the unfavourable ſymptoms may be reckoned an exceſſive looſeneſs with a hard ſwelled belly; large

* Deafness is not always a favourable symptom in this disease. Perhaps it was only so when occasioned by abscesses formed within the ears.

ack or livid blotches breaking out upon the skin; hthæ in the mouth; cold clammy ſweats; blindneſs; ange of the voice; a wild ſtaring of the eyes; diffi- lty of ſwallowing; inability to put out the tongue; d a conſtant inclination to uncover the breaſt. hen the ſweat and ſaliva are tinged with blood, and e urine is black, or depoſits a black ſooty ſediment, e patient is in great danger. Starting of the tendons, d fœtid, ichorous, involuntary ſtools, attended with ldneſs of the extremites, are generally the forerun- rs of death.

REGIMEN.—In the treatment of this diſeaſe, we ght to endeavour as far as poſſible to counteract the trid tendency of the humours; to ſupport the pa- nt's ſtrength and ſpirits, and to aſſiſt Nature in ex- lling the cauſe of the diſeaſe, by gently promoting rſpiration and the other evacuations.

It has been obſerved, that putrid fevers are often caſioned by unwholeſome air, and of courſe they muſt aggravated by it. Care ſhould therefore be taken prevent the air from ſtagnating in the patient's amber, to keep it cool, and renew it frequently, by ening the doors or windows of ſome adjacent apart- ent. The breath and perſpiration of perſons in per- ct health ſoon render the air of a ſmall apartment xious; but this will ſooner happen from the perſpi- tion and breath of a perſon whoſe whole maſs of hu- ours are in a putrid ſtate.

Beſides the frequent admiſſion of freſh air, we would commend the uſe of vinegar, verjuice, juice of lemon, eville orange, or any kind of vegetable acid that can moſt readily obtained. Theſe ought frequently to ſprinkled upon the floor, the bed, and every part the room. They may alſo be evaporated with a hot on, or by boiling, &c. The freſh skins of lemons or anges ought likewiſe to be laid in different parts of e room, and they ſhould likewiſe be held to the pa- ent's noſe. The uſe of acids in this manner would ot only prove very refreſhing to the patient, but ould tend to prevent the infection from ſpreading

among thoſe who attend him. Strong ſcented herbs, as rue, tanſy, roſemary, wormwood, &c. may likewiſe be laid in different parts of the houſe, and ſmelled to by thoſe who go near the patient.

The patient muſt not only be kept cool, but likewiſe quiet and eaſy. The leaſt noiſe will affect his head, and the ſmalleſt fatigue will be apt to make him faint.

Few things are of greater importance in this diſeaſe than acids, which ought to be mixed with all the patient's food as well as drink. Orange, lemon, or vinegar whey, are all very proper, and may be drank by turns according to the patient's inclination. They may be rendered cordial by the addition of wine in ſuch quantity as the patient's ſtrength ſeems to require. When he is very low he may drink negus, with only one half water, and ſharpened with the juice of Seville orange or lemon. In ſome caſes a glaſs of wine may now and then be allowed. The moſt proper wine is Rheniſh; but if the body be open, red port or claret is to be preferred.

When the body is bound, a tea ſpoonful of the cream of tartar may be put into a cup of the patient's drink, as there is occaſion; or he may drink a decoction of tamarinds, which will both quench his thirſt, and promote a diſcharge by ſtool.

If camomile tea will ſit upon his ſtomach, it is a very proper drink in this diſeaſe. It may be ſharpened by adding to every cup of tea, ten or fifteen drops of the elixir of vitriol.

The food muſt be light, as panado, or groat gruel, to which a little wine may be added, if the patient be weak and low; and they ought all to be ſharpened with the juice of orange, the jelly of currants, or the like. The patient ought likewiſe to eat freely of ripe fruits, as roaſted apples, currant or gooſeberry tarts, preſerved cherries, or plums, &c.

Taking a little food or drink frequently, not only ſupports the ſpirits, but counteracts the putrid tendency of the humours; for which reaſon the patient

ight frequently to be ſipping ſmall quantities of ſome the acid liquors mentioned above, or any that may be ore agreeable to his palate, or more readily obtained.

If he be delirious, his feet and hands ought to be fre- ently fomented with a ſtrong infuſion of camomile owers. This, or an infuſion of the bark, to ſuch as n afford it, cannot fail to have a good effect. Fomen- tions of this kind not only relieve the head, by relax- g the veſſels in the extremities, but as their contents e abſorbed and taken into the ſyſtem, they may aſſiſt preventing the putreſcency of the humours.

MEDICINE.—If a vomit be given at the beginning this fever, it will hardly fail to have a good effect; it if the fever has gone on for ſome days, and the mptoms are violent, vomits are not quite ſo ſafe. he body, however, is always to be kept gently open, clyſters, or mild laxative medicines.

Bleeding is ſeldom neceſſary in putrid fevers. If ere be ſigns of an inflammation, it may ſometimes be rmitted at the firſt onſet; but the repetition of it nerally proves hurtful.

Bliſtering plaſters are never uſed, except in the eateſt extremities. If the petechiæ or ſpots ſhould ddenly diſappear, the patient's pulſe ſink remarkably, d a delirium with other bad ſymptoms come on, bliſ- ing may be permitted. In this caſe the bliſtering- aſters are to be applied to the head, and inſide of the gs or thighs. But as they are ſometimes apt to occa- n a gangrene, we would rather recommend warm taplaſms, or poultices of muſtard and vinegar to be plied to the feet, having recourſe to bliſters only in e utmoſt extremities.

It is common in the beginning of this fever to give e emetic tartar in ſmall doſes, repeated every ſecond third hour, till it ſhall either vomit, purge, or throw e patient into a ſweat. This practice is very proper, ovided it be not puſhed ſo far as to weaken the pa- nt.

A very ridiculous notion has long prevailed, of ex- lling the poiſonous matter of malignant diſeaſe by fling doſes of cordial or alexipharmic medicines. In

conſequence of this notion, the contrayerva-root, the cordial confection, the mithridate, &c. have been extolled as infallible remedies. There is reaſon however to believe that theſe ſeldom do much good. Where cordials are neceſſary, we know none that is ſuperior to good wine; and therefore again recommend it both as the ſafeſt and beſt. Wine, with acids and antiſeptics, are the only things to be relied on in the cure of malignant fevers.

In the moſt dangerous ſpecies of this diſeaſe, when it is attended with purple, livid, or black ſpots, the Peruvian bark muſt be adminiſtered. I have ſeen it, when joined with acids, prove ſucceſsful, even in caſes where the petechiæ had the moſt threatening aſpect. But, to anſwer this purpoſe, it muſt not only be given in large doſes, but duly perſiſted in.

The beſt method of adminiſtering the bark is certainly in ſubſtance. An ounce of it in powder may be mixed with half an Engliſh pint of water, and the ſame quantity of red wine, and ſharpened with the elixir or the ſpirit of vitriol, which will both make it ſit eaſier on the ſtomach, and render it more beneficial. Two or three ounces of the ſyrup of lemon may be added, and two table ſpoon-fulls of the mixture taken every two hours, or oftener, if the ſtomach is able to bear it.

Thoſe who cannot take the bark in ſubſtance, may infuſe it in wine, as recommended in the preceding diſeaſe.

If there be a violent looſeneſs, the bark muſt be boiled in red wine with a little cinnamon, and ſharpened with the elixir of vitriol as above. Nothing can be more beneficial in this kind of looſeneſs than plenty of acids, and ſuch things as promote a gentle perſpiration.

If the patient be troubled with vomiting, a dram of the ſalt of wormwood, diſſolved in an ounce and an half of freſh lemon juice, and made into a draught, with an ounce of ſimple cinnamon water, and a bit of ſugar, may be given and repeated as often as it is neceſſary.

If ſwellings of the glands appear, their ſuppuration is

to be promoted by the application of poultices, ripening cataplasms, &c.; and as soon as there is any appearance of matter in them, they ought to be laid open, and the poultices continued.

I have known large ulcerous sores break out in various parts of the body, in the decline of this fever, of a livid gangrenous appearance, and a most putrid cadaverous smell. These gradually healed, and the patient recovered, by the plentiful use of Peruvian bark and wine, sharpened with spirits of vitriol.

For preventing putrid fevers we would recommend a strict regard to cleanliness; a dry situation; sufficient exercise in the open air; wholesome food, and a moderate use of generous liquours. Infection ought above all things to be avoided. No constitution is proof against it. I have known persons seized with a putrid fever, by only making a single visit to a patient in it; others have caught it by lodging for one night in a town where it prevailed; and some by attending the funerals of such as died of it *.

When a putrid fever seizes any person in a family, the greatest attention is necessary to prevent the disease from spreading. The sick ought to be placed in a large apartment, as remote from the rest of the family as possible; he ought likewise to be kept extremely clean, and should have fresh air frequently let into his chamber; whatever comes from him should be immediately removed, his linen should be frequently changed, and those in health ought to avoid all unnecessary communication with him.

Any one who is apprehensive of having caught the infection, ought immediately to take a vomit, and to

* The late Sir John Pringle expressed a concern lest these cautions should prevent people from attending their friends or relations when afflicted with putrid fevers. I told him I meant only to discourage unnecessary attendance, and mentioned a number of instances where putrid fevers had proved fatal to persons, who were rather hurtful than beneficial to the sick. This sagacious physician agreed with me, in thinking that a good doctor and a careful nurse, were the only necessary attendants; and that all others not only endangered themselves, but generally, by their solicitude, and ill directed care, hurt the sick.

work it off by drinking plentifully of camomile tea. This may be repeated in a day or two, if the apprehenſions ſtill continue, or any unfavourable ſymptoms appear.

The perſon ought likewiſe to take an infuſion of the bark and camomile flowers for his ordinary drink; and before he goes to bed, he may drink an Engliſh pint of pretty ſtrong negus, or a few glaſſes of generous wine. I have been frequently obliged to follow this courſe, when malignant fevers prevailed, and have likewiſe recommended it to others with conſtant ſucceſs.

People generally fly to bleeding and purging as antidotes againſt infection; but theſe are ſo far from ſecuring them, that they often, by debilitating the body, increaſe the danger.

Thoſe who wait upon the ſick in putrid fevers, ought always to have a piece of ſponge or handkerchief dipped in vinegar, or juice of lemon, to ſmell to while near the patient. They ought likewiſe to waſh their hands, and, if poſſible, to change their clothes, before they go into company.

The putrid or ſpotted fever ſo nearly approaches the plague, that it may well be denominated the peſtilential fever of Europe. In the narrow, cloſe, and filthy lanes of this city, and her noiſome priſons, its ravages are often moſt alarming.

The marſhy grounds of St. George's fields, without any proper fall or drain to carry off the filth, and inhabited by near half a million of perſons, who continually inhale the moſt fœtid and poiſonous effluvia, can hardly fail, at ſome period, to produce ſome terrible putrid diſorder. Amidſt the many improvements in the various parts of this metropolis, it is equally the cauſe of wonder and regret that no attempts have been made by proper drains to render ſalubrious ſo large and populous a diſtrict.

Alarming as this fever is, and nearly reſembling the plague, it has nevertheleſs, even in its worſt ſtages, and where putrefaction has actually taken place, been cured by the uſe of bark, wine, and other antiſeptic medicines.

CHAP. XXI.

OF THE MILIARY FEVER.

THIS fever takes its name from the ſmall puſtules or bladders which appear on the ſkin, reſembling in ſhape and ſize the ſeeds of millet. The puſtules are either red or white, and ſometimes both are mixed together.

The whole body is ſometimes covered with puſtules, but they are generally more numerous where the ſweat is moſt abundant, as on the breaſt, the back, &c. A gentle ſweat, or moiſture on the ſkin, greatly promotes the eruption; but when the skin is dry, the eruption is more painful and dangerous.

Sometimes this is a primary diſeaſe, but it is much oftener only a ſymptom of ſome other malady, as the ſmall pox, meaſles, ardent, putrid, or nervous fever, &c. In all theſe caſes it is generally the effect of too hot a regimen or medicines.

The miliary fever generally attacks the idle and the phlegmatic, or perſons of a relaxed habit. The young and the aged are more liable to it than thoſe in the vigour and prime of life. It is likewiſe more incident to women than men, eſpecially the delicate and the indolent, who, neglecting exerciſe, keep continually within doors, and live upon weak watery diet. Such females are extremely liable to be ſeized with this diſeaſe in child bed, aud often loſe their lives by it.

CAUSES.——The miliary fever is ſometimes occaſioned by violent paſſion or affections of the mind, as exceſſive grief, anxiety, thoughtfulneſs, &c. It may likewiſe be occaſioned by exceſſive watching, great evacuations, a weak watery diet, rainy ſeaſons, eating too freely of cold, crude, unripe fruits, as plums, cherries, cucumbers, melons, &c. Impure waters, or proviſions which have been ſpoiled by rainy reaſons, long keeping, &c. may likewiſe cauſe miliary fevers. They may alſo be occaſioned by the ſtoppage of any

cuſtomary evacuations, as iſſues, ſetons, ulcers, the bleeding piles in men, or the menſtrual flux in women, &c.

This diſeaſe in childbed women is ſometimes the effect of great coſtiveneſs during pregnancy; it may likewiſe be occaſioned by their exceſſive uſe of green traſh, and other unwholeſome things, in which pregnant women are too apt to indulge. But its moſt general cauſe is indolence. Such women as lead a ſedentary life, eſpecially during pregnancy, and at the ſame time live groſsly, can hardly eſcape this diſeaſe in childbed. Hence it proves extremely fatal to women of faſhion, and likewiſe to thoſe women in manufacturing towns, who in order to aſſiſt their husbands, ſit cloſe within doors for almoſt the whole of their time. But among women who are active and laborious, who live in the country, and take ſufficient exerciſe without doors, this diſeaſe is very little known.

SYMPTOMS.—When this is a primary diſeaſe, it makes its attack, like moſt other eruptive fevers, with a ſlight ſhivering, which is ſucceeded by heat, loſs of ſtrength, faintiſhneſs, ſighing, a low quick pulſe, difficulty of breathing, with great anxiety and oppreſſion of the breaſt. The patient is reſtleſs, and ſometimes delirious, the tongue appears white, and the hands ſhake, with often a burning heat in the palms; and in childbed women the milk generally goes away, and the other diſcharges ſtop.

The patient feels an itching or pricking pain under the skin, after which innumerable ſmall puſtules of a red or white colour begin to appear. Upon this the ſymptoms generally abate, the pulſe becomes more full and ſoft, the skin grows moiſter, and the ſweat, as the diſeaſe advances, begins to have a peculiar fœtid ſmell, the great load on the breaſt, and oppreſſion of the ſpirits generally go off, and the cuſtomary evacuations gradually return. About the ſixth or ſeventh day from the eruption, the puſtules begin to dry and fall off, which occaſions a very diſagreeable itching in the skin.

It is impoſſible to aſcertain the exact time when the puſtules will either appear or go off. They generally

come out on the third or fourth day, when the eruption is critical; but when ſymptomatical, they may appear at any time of the diſeaſe.

Sometimes the puſtules appear and vaniſh by turns. When that is the caſe, there is always danger; but when they go in all of a ſudden, and do not appear again, the danger is very great.

In childbed women, the puſtules are commonly at firſt filled with clear water, afterwards they grow yellowiſh. Sometimes they are interſperſed with puſtules of a red colour. When theſe only appear, the diſeaſe goes by the name of a *rash*.

REGIMEN.—In all eruptive fevers, of whatever kind, the chief point is to prevent the ſudden diſappearance of the puſtules, and to promote their maturation. For this purpoſe, the patient muſt be kept in ſuch a temperature, as neither to puſh out the eruption too faſt, nor to cauſe it to retreat prematurely. The diet and drink ought therefore to be in a moderate degree nouriſhing and cordial, but neither ſtrong nor heating. The patient's chamber ought neither to be kept too hot nor cold; and he ſhould not be too much covered with clothes. Above all, the mind is to be kept eaſy and cheerful. Nothing ſo certainly makes an eruption go in as fear, or the apprehenſion of danger.

The food muſt be weak chicken broth, with bread, panado, ſago, or groat gruel, &c. to a gill of which may be added a ſpoonful or two of wine, as the patient's ſtrength requires, with a few grains of ſalt, and a little ſugar. Good apples, roaſted or boiled, with other ripe fruits of an opening cooling nature, may be eaten.

The drink may be ſuited to the ſtate of the patient's ſtrength and ſpirits. If theſe be pretty high, the drink ought to be weak, as water gruel, balm tea, or the decoction mentioned below †.

When the patient's ſpirits are low, and the eruption

† Take two ounces of the ſhavings of hartſhorn, and the ſame quantity of ſarſaparilla; boil them in two Engliſh quarts of water. To the ſtrained decoction add a little white ſugar, and let the patient take it for his ordinary drink.

does not riſe ſufficiently, his drink muſt be a little more generous; as wine whey, or ſmall negus, ſharpened with the juice of orange or lemon, and made ſtronger or weaker as circumſtances may require.

Sometimes the miliary fever approaches towards a putrid nature, in which caſe the patient's ſtrength muſt be ſupported with generous cordials, joined with acids, and if the degrees of putreſcence be great, the Peruvian bark muſt be adminiſtered. If the head be much affected, the body muſt be kept open by emollient clyſters ‡.

MEDICINE.—If the food and drink be properly regulated, there will be little occaſion for medicine in this diſeaſe. Should the eruption, however, not riſe, or the ſpirits flag, it will not only be neceſſary to ſupport the patient with cordials, but likewiſe to apply bliſtering plaſters. The moſt proper cordial in this caſe is good wine, which may either be taken in the patient's food or drink; and if there be ſigns of putreſcence, the bark and acids may be mixed with wine, as directed in the putrid fever.

Some recommend bliſtering throughout the whole courſe of this diſeaſe; and where nature flags, and the

‡ In the Commercium Literarium for the year 1735, we have the history of an epidemical miliary fever which raged at Strasburg in the months of November, December and January; from which we learn the necessity of a temperate regimen in this malady, and likewise that physicians are not always the first who discover the proper treatment of diseases. "This fever made terrible havock even among men of robust constitutions, and all medicines proved in vain. They were seized in an instant with shivering, yawning, stretching, and pains in the back, succeeded by a most intense heat; at the same time there was a great loss of strength and appetite. On the seventh or ninth day the miliary eruptions appeared, or spots like flea bites, with great anxiety, a delirium, restlessness and tossing in bed. Bleeding was fatal. While matters were in this unhappy situation, a midwife of her own accord gave to a patient, in the height of the disease, a clyster of rain water and butter without salt; and for his ordinary drink a quart of spring water, half a pint of generous wine, the juice of a lemon and six ounces of the whitest sugar, gently boiled till a scum arose, and this with great success; for the belly was soon loosened, the grievous symptoms vanished, and the patient was restored to his senses and snatched from the jaws of death"—This practice was imitated by others with the like happy effects.

eruption comes and goes, it may be neceſſary to keep up a ſtimulus, by a continual ſucceſſion of ſmall bliſtering-plaſters; but we would not recommend above one at a time. If, however, the pulſe ſhould ſink remarkably, the puſtules go in, and the head be affected, it will be neceſſary to apply ſeveral bliſtering plaſters to the moſt ſenſible parts, as the inſide of the legs, thighs, &c.

Bleeding is ſeldom neceſſary in this diſeaſe, and ſometimes it does much hurt, as it weakens the patient, and depreſſes his ſpirits. It is therefore never to be attempted unleſs by the advice of a phyſician. We mention this, becauſe it has been cuſtomary to treat this diſeaſe in child-bed women by plentiful bleeding, and other evacuations, as if it were highly inflammatory. But this practice is generally very unſafe. Patients in this ſituation bear evacuations very ill. And, indeed, the diſeaſe ſeems often to be more of a putrid than of an inflammatory nature.

Though this fever is often occaſioned in child-bed women by too hot a regimen, yet it would be dangerous to leave that off all of a ſudden, and have recourſe to a very cool regimen and large evacuations. We have reaſon to believe, that ſupporting the patient's ſpirits, and promoting the natural evacuations, is here much ſafer than to have recourſe to artificial ones, as theſe, by ſinking the ſpirits, ſeldom fail to increaſe the danger.

If the diſeaſe proves tedious or the recovery ſlow, we would recommend the Peruvian bark, which may either be taken in ſubſtance, or infuſed in wine and water, as the patient inclines.

The miliary fever, like other eruptive diſeaſes, requires gentle purging, which ſhould not be neglected, as ſoon as the fever is gone off, and the patient's ſtrength will permit.

To prevent this diſeaſe, a pure dry air ſufficient exerciſe, and wholeſome food are neceſſary. Pregnant women ſhould guard againſt coſtiveneſs, and take daily as much exerciſe as they can bear, avoiding all green traſhy fruits, and other unwholeſome things; and, when in childbed, they ought ſtrictly to obſerve a cool regimen.

In this fever, the changes are ſo frequent and ſudden, as to require the moſt conſtant attention; and, as it often ſhews altogether new ſymptoms, and aſſumes quite a different character, the diet and regimen demand an appropriate change; otherwiſe the death of the patient muſt be the inevitable conſequence. When this is conſidered, it will evince very ſtrongly the remarks made in a former Chapter, of the futility and danger of any general ſtrong fever powder.

CHAP. XXII.

OF THE REMITTING FEVER.

THIS fever takes its name from a remiſſion of the ſymptoms, which happens ſometimes ſooner, and ſometimes later, but generally before the eighth day. The remiſſion is generally preceded by a gentle ſweat, after which the patient ſeems greatly relieved, but in a few hours the fever returns. Theſe remiſſions return at very irregular periods, and are ſometimes of longer, ſometimes of ſhorter duration; the nearer, however, that the fever approaches to a regular intermittent, the danger is the leſs.

CAUSES.—Remitting fevers prevail in low marſhy countries abounding with wood and ſtagnating water; but they prove moſt fatal in places where great heat and moiſture are combined, as in ſome parts of Africa, the province of Bengal in the Eaſt Indies, &c. where remitting fevers are generally of a putrid kind, and prove very fatal. They are moſt frequent in cloſe calm weather, eſpecially after rainy ſeaſons, great inundations, or the like. No age, ſex, or conſtitution, is exempted from the attack of this fever, but it chiefly ſeizes perſons of a relaxed habit, who live in low dirty habitations, breathe an impure ſtagnating air, take little exerciſe, and uſe unwholeſome diet.

SYMPTOMS.—The firſt ſymptoms of this fever are generally yawning, ſtretching, pain, and giddineſs

in the head, with alternate fits of heat and cold. Sometimes the patient is affected with a delirium at the very first attack. There is a pain, and sometimes a swelling, about the region of the stomach, the tongue is white, the eyes and skin frequently appear yellow, and the patient is often afflicted with bilious vomitings. The pulse is sometimes a little hard, but seldom full, and the blood when let, rarely shews any signs of inflammation. Some patients are exceedingly costive, and others are afflicted with a very troublesome looseness.

It is impossible to describe all the symptoms of this disease, as they vary according to the situation, the season of the year, and the constitution of the patient. They may likewise be greatly changed by the method of treatment, and by many other circumstances too tedious to mention. Sometimes the bilious symptoms predominate, sometimes the nervous, and at other times the putrid. Nor is it all uncommon to find a succession of each of these, or even a complication of them at the same time in the same person.

REGIMEN.—The regimen must be adapted to the prevailing symptoms. When there are any signs of inflammation, the diet must be slender, and the drink weak and diluting. But when nervous or putrid symptoms occur, it will be necessary to support the patient with food and liquors of a more generous nature, such as we recommended in the immediately preceding fevers. We must, however, be very cautious in the use of things of a heating quality, as this fever is frequently changed into a CONTINUAL by an hot regimen and improper medicines.

Whatever the symptoms are, the patient ought to be kept cool, quiet, and clean; his apartment, if possible, should be large, and frequently ventilated by letting in fresh air at the doors and windows. It ought likewise to be sprinkled with vinegar, juice of lemon, or the like. His linen, bed clothes, &c. should be frequently changed, and all his excrements immediately removed. Though these things have been recommended before, we think it necessary to repeat them here, as they are

of more importance to the ſick than practitioners are apt to imagine ‡.

MEDICINE.—In order to cure this fever, we muſt endeavour to bring it to a regular intermiſſion. This intention may be promoted by bleeding, if there be any ſigns of inflammation; but when that is not the caſe, bleeding is by no means to be attempted, as it will weaken the patient and prolong the diſeaſe. A vomit, however, will ſeldom be improper, and is generally of great ſervice. Twenty or thirty grains of ipecacuanha will anſwer this purpoſe very well; but where it can be obtained, we would rather recommend a grain or two of tartar emetic, with five or ſix grains of ipecacuanha, to be made into a draught, and given for a vomit. This may be repeated once or twice at proper intervals, if the ſickneſs or nauſea continues.

The body ought to be kept open either by clyſters or gentle laxatives, as weak infuſions of ſenna and manna, ſmall doſes of the lenitive electuary, cream of tartar, tamarinds, ſtewed prunes, or the like; but all potent or draſtic purges are to be carefully avoided.

By this courſe the fever in a few days may generally be brought to a pretty regular or diſtinct intermiſſion, in which caſe the Peruvian bark may be adminiſtered, and it will ſeldom fail to perfect the cure. It is needleſs here to repeat the methods of giving the bark, as we have already had occaſion frequently to mention them.

The moſt likely way to avoid this fever is to uſe a wholeſome and nouriſhing diet, to pay the moſt ſcrupulous attention to cleanlineſs, to keep the body warm, to take ſufficient exerciſe, and in hot countries to avoid damp ſituations, night air, evening dews, and the like. In countries where it is endemical, the beſt preventive

‡ That ingenious physician Dr. Lind, in his inaugural diſſertation concerning the putrid remitting fever of Bengal obſerves——"The patient's ſhirt, bed clothes, and bedding, ought frequently to be changed, and expoſed to the air, and all his excrements immediately removed; the bed chamber ſhould be well ventilated, and frequently ſprinkled with vinegar; in ſhort, every attention ſhould be paid to the patient. I can affirm, that a phyſician who puts them in practice will much oftener ſucceed, than one who is even more ſkilful, but has not opportunity of uſing theſe means."

medicine which we can recommend is the Peruvian bark, which may either be chewed, or infuſed in brandy or wine, &c. Some recommend ſmoking tobacco as very beneficial in marſhy countries, both for prevention of this and intermitting fevers.

To ſoldiers in camps, and in the various ſituations dangerous to health where their duty leads them, every precaution ſhould be uſed to guard them againſt theſe fevers. Thoughtleſs and careleſs of their perſons, our brave defenders deſpiſe diſeaſe as much as they do danger; and as diſorders of this kind are more to be dreaded than the approach of an enemy, the proper means of prevention ſhould be ſtrictly enforced by the ſuperior officers and medical attendants.

CHAP. XXIII.

OF THE SMALL POX.

THIS diſeaſe, which originally came from Arabia, is now become ſo general, that very few eſcape it at one time of life or another. It is a moſt contagious malady, and has for many years proved the ſcourge of Europe.

The ſmall pox generally appears towards the ſpring. They are very frequent in ſummer, leſs ſo in autumn, and leaſt of all in winter. Children are moſt liable to this diſeaſe; and thoſe whoſe food is unwholeſome, who want proper exerciſe, and abound with groſs humours, run the greateſt hazard from it.

The diſeaſe is diſtinguiſhed into the diſtinct and confluent kind; the latter of which is always attended with danger. There are likewiſe other diſtinctions of the ſmall pox; as the chryſtalline, the bloody, &c.

CAUSES.—The ſmall pox is commonly caught by infection. Since the diſeaſe was firſt brought into Europe, the infection has never been wholly extinguiſhed, nor have any proper methods, as far as I know, been taken for that purpoſe; ſo that now it has become in a

manner conſtitutional. Children who have overheated themſelves by running, wreſtling, &c. or adults after a debauch, are moſt apt to be ſeized with the ſmall-pox.

SYMPTOMS.—This diſeaſe is ſo generally known, that a minute deſcription of it is unneceſſary. Children commonly look a little dull, ſeem liſtleſs and drowſy for a few days before the more violent ſymptoms of the ſmall pox appear. They are likewiſe more inclined to drink than uſual, have little appetite for ſolid food, complain of wearineſs, and upon taking exerciſe, are apt to ſweat. Theſe ſucceed by ſlight fits of cold and heat by turns, which, as the time of the eruption approaches, become more violent, and are accompanied with pains of the head and loins, vomiting, &c. The pulſe is quick, with a great heat of the ſkin, and reſtleſſneſs. When the patient drops aſleep, he wakes in a kind of horror, with a ſudden ſtart, which is a very common ſymptom of the approaching eruption; as are alſo convulſion fits in very young children.

About the third or fourth day from the time of ſickening, the ſmall pox generally begins to appear; ſometimes, indeed, they appear ſooner, but that is no favourable ſymptom. At firſt they very nearly reſemble fleabites, and are ſooneſt diſcovered on the face, arms, and breaſt.

The moſt favourable ſymptoms are a ſlow eruption, and an abatement of the fever as ſoon as the puſtules appear. In a mild diſtinct kind of ſmall pox the puſtules ſeldom appear before the fourth day from the time of ſickening, and they generally keep coming out gradually for ſeveral days after. Puſtules which are diſtinct, with a florid red baſis, and which fill with thick purulent matter, firſt of a whitiſh, and afterwards of a yellowiſh colour, are the beſt.

A livid brown colour of the puſtules is an unfavourable ſymptom; as alſo when they are ſmall and flat, with black ſpecks in the middle. Puſtules which contain a thin watery ichor are very bad. A great number of pocks on the ſide is always attended with danger.

It is likewiſe a bad ſign when they run into one another.

It is a moſt unfavourable ſymptom when petechiæ or purple, brown, or blacks ſpots are interſperſed among the puſtules. Theſe are ſigns of a putrid diſſolution of the blood, and ſhew the danger to be very great. Bloody ſtools or urine, with a ſwelled belly, are bad ſymptoms; as is alſo a continual ſtrangury. Pale urine and a violent throbbing of the arteries of the neck are ſigns of an approaching delirium or of convulſion fits. When the face does not ſwell, or falls before the pocks come to maturity, it is very unfavourable. If the face begins to fall about the eleventh or twelfth day, and at the ſame time the hands and feet begin to ſwell, the patient generally does well; but when theſe do not ſucceed each other, there is reaſon to apprehend danger. When the tongue is covered with a brown cruſt, it is an unfavourable ſymptom. Cold ſhivering fits coming on at the height of the diſeaſe, are likewiſe unfavourable. Grinding of the teeth, when it proceeds from an affection of the nervous ſyſtem, is a bad ſign; but ſometimes it is occaſioned by worms, or a diſordered ſtomach.

REGIMEN.——When the firſt ſymptoms of the ſmall pox appear, people are ready to be alarmed, and often fly to the uſe of medicine, to the great danger of the patient's life. I have known children, to appeaſe the anxiety of their parents, bled, bliſtered, and purged, during the fever which preceded the eruption of the ſmall pox, to ſuch a degree, that Nature was not only diſturbed in her operation, but rendered unable to ſupport the puſtules after they were out; ſo that the patient, exhauſted by mere evacuations, ſunk under the diſeaſe.

When convulſions appear, they give a dreadful alarm. Immediately ſome noſtrum is applied, as if this were a primary diſeaſe; whereas it is only a ſymptom, and far from being an unfavourable one, of the approaching eruption. As the fits generally go off before the actual appearance of the ſmall pox, it is attributed

to the medicine, which by this means acquires a reputation without any merit ‡.

All that is, generally ſpeaking, neceſſary during the eruptive fever, is to keep the patient cool and eaſy; allowing him to drink freely of ſome weak diluting liquors; as balm tea, barley water, clear whey, gruels, &c. He ſhould not be confined to bed, but ſhould ſit up as much as he is able, and ſhould have his feet and legs frequently bathed in lukewarm water. His food ought to be very light, and he ſhould be as little diſturbed with company as poſſible.

Much miſchief is done at this period by confining the patient too ſoon to his bed, and plying him with warm cordials or ſudorific medicines. Every thing that heats and inflames the blood increaſes the fever, and puſhes out the puſtules. This has numberleſs ill effects. It not only increaſes the number of puſtules, but likewiſe tends to make them run into one another; and when they have been puſhed out with too great violence, they generally fall in before they come to maturity.

The good women, as ſoon as they ſee the ſmall pox begin to appear, commonly ply their tender charge with cordials, ſaffron, and marigold teas, wine, punch, and even brandy itſelf. All theſe are given with a view, as they term it, to throw out the eruption from the heart. This, like moſt other popular miſtakes, is the abuſe of a very juſt obſervation——that when there is a moiſture on the ſkin, the pocks riſe better, and the patient is eaſier, than when it continues dry and parched.—But that is no reaſon for forcing the patient into a ſweat. Sweating never relieves unleſs where it comes ſpontaneouſly, or it is the effect of drinking weak diluting liquors.

§ Convulſion fits are no doubt very alarming, but their effects are often ſalutary. They ſeem to be one of the means made use of by Nature for breaking the force of a fever. I have always obſerved a fever abated, and ſometimes quite removed, after one or more convulſion fits. This readily accounts for convulſions being a favourable ſymptom in the fever which precedes the eruption of the ſmall pox as every thing which mitigates this fever leſſens the eruption.

Children are often ſo peeviſh, that they will not lie a-bed without a nurſe conſtantly by them. Indulging them in this, we have reaſon to believe has many bad effects both upon the nurſe and child. Even the natural heat of the nurſe cannot fail to augment the fever of the child; but if ſhe too proves feveriſh, which is often the caſe, the danger muſt be increaſed †.

Laying ſeveral children who have the ſmall pox in the ſame bad, has many ill conſequences. They ought if poſſible never to be in the ſame chamber, as the perſpiration, the heat, ſmell, &c. all tend to augment the fever, and to heighten the diſeaſe. It is common among the poor to ſee two or three children lying in the ſame bed, with ſuch a load of puſtules, that even their ſkins ſtick together. One can hardly view a ſcene of this kind without being ſickened by the ſight; but how muſt the effluvia affect the poor patients, many of whom periſh by this uſage ‡.

A very dirty cuſtom prevails among the lower claſs of people, of allowing children in the ſmall pox to keep on the ſame linen during the whole period of that loathſome diſeaſe. This is done leſt they ſhould catch cold, but it has many ill conſequences. The linen becomes hard by the moiſture which it abſorbs, and frets the tender ſkin. It likewiſe occaſions a bad ſmell,

† I have known a nurſe who had the ſmall pox before, ſo infected by lying conſtantly a-bed with a child in a bad kind of ſmall pox, that ſhe had not only a great number of puſtules which broke out all over her body, but afterwards a malignant fever which terminated in a number of impoſthumes or boils, and from which ſhe narrowly eſcaped with her life. We mention this to put others on their guard againſt the danger of this virulent infection.

‡ This obſervation is likewiſe applicable to hoſpitals, workhouſes, &c. where numbers of children happen to have the ſmall pox at the ſame time. I have ſeen above forty children cooped up in one apartment all the while they had this diſeaſe, without any of them being admitted to breathe the freſh air. No one can be at a loſs to ſee the impropriety of ſuch conduct. It ought to be a rule not only in hoſpitals for the ſmall pox, but likewiſe for other diſeaſes, that no patient ſhould be within ſight or hearing of another. This is a matter to which too little regard is paid. In moſt hoſpitals and infirmaries, the ſick, the dying, and the dead, are often to be ſeen in the ſame apartment.

which is very pernicious both to the patient and thoſe about him; beſides, the filth and ſordes which adhere to the linen being reſorbed, or taken up again into the body, greatly augment the diſeaſe.

A patient ſhould not be ſuffered to be dirty in an internal diſeaſe, far leſs in the ſmall pox. Cutaneous diſorders are often occaſioned by naſtineſs alone, and are always increaſed by it. Were the patient's linen to be changed every day, it would greatly refreſh him. Care indeed is to be taken that the linen be thoroughly dry. It ought likewiſe to be put on when the patient is moſt cool.

So ſtrong is the vulgar prejudice in this country, notwithſtanding all that has been ſaid againſt the hot regimen in the ſmall pox, that numbers ſtill fall a ſacrifice to that error. I have ſeen poor women travelling in the depth of winter, and carrying their children along with them in the ſmall pox, and have frequently obſerved others begging by the way ſide with infants in their arms covered with puſtules; yet I could never learn that one of theſe children died by this ſort of treatment. This is certainly a ſufficient proof of the ſafety, at leaſt of expoſing patients in the ſmall pox to the open air. There can be no reaſon, however, for expoſing them to public view. It is now very common in the environs of great towns to meet patients in the ſmall pox on the public walks. This practice, however well it may ſuit the purpoſes of boaſting inoculators, is dangerous to the citizens, and contrary to the laws of humanity and ſound policy.

The food in this diſeaſe ought to be very light, and of a cooling nature, as panado, or bread boiled with equal quantities, of milk and water, good apples roaſted or boiled with milk, and ſweetened with a little ſugar or ſuch like.

The drink may be equal parts of milk and water, clear ſweet whey, barley water, or thin gruel, &c. After the pocks are full, butter milk, being of an opening and cleanſing nature, is a very proper drink.

MEDICINE.——This diſeaſe is generally divided

into four different periods viz. the fever which precedes the eruption, the eruption itſelf, the ſuppuration or maturation of the puſtules, and the ſecondary fever.

It has already been obſerved, that little more is neceſſary during the primary fever than to keep the patient cool and quiet, allowing him to drink diluting liquors, and bathing his feet frequently in warm water. Though this be generally the ſafeſt courſe that can be taken with infants, yet adults of a ſtrong conſtitution and plethoric habit ſometimes require bleeding. When a full pulſe, a dry ſkin, and other ſymptons of inflammation, render this operation neceſſary, it ought to be performed; but unleſs theſe ſymptoms are urgent, it is ſafer to be let alone: if the body is bound, emollient clyſters may be thrown in.

If there is a great nauſea or inclination to vomit, weak camomile tea or lukewarm water may be drank, in order to cleanſe the ſtomach. At the beginning of a fever, Nature generally attemps a diſcharge, either upwards or downwards; which if promoted by gentle means, would tend greatly to abate the violence of the diſeaſe.

Though every method is to be taken during the primary fever by a cool regimen, &c. to prevent too great an eruption, yet after the puſtules have made their appearance, our buſineſs is to promote the ſuppuration by diluting drink, light food, and, if Nature ſeems to flag, by generous cordials. When a low creeping pulſe, faintiſhneſs and great loſs of ſtrength, render cordials neceſſary, we would recommend good wine, which may be made into negus, with an equal quantity of water, and ſharpened with the juice of orange the jelly of currants, and the like. Wine whey, ſharpened as above, is likewiſe a proper drink in this caſe; great care, however, muſt be taken not to overheat the patient by any of theſe things. This, inſtead of promoting, would retard the eruption.

The riſing of the ſmall-pox is often prevented by the violence of the fever. In this caſe the cool regi-

men is ſtrictly to be obſerved. The patient's chamber muſt not only be kept cool, but he ought likewiſe frequently to be taken out of bed, and to be lightly covered with clothes while in it.

Exceſſive reſtleſſneſs often prevents the riſing and filling of the ſmall-pox: when this happens, gentle opiates are neceſſary. Theſe, however ought always to be adminiſtred with a ſparing hand. To an infant, a tea-ſpoonful of ſyrup of poppies may be given every five or ſix hours till it has the deſired effect. An adult will require a table-ſpoonful in order to anſwer the ſame purpoſe.

If the patient be troubled with a ſtranguary, or ſuppreſſion of urine, which often happens in the ſmall-pox, he ſhould be frequently taken out of bed; and, if he be able, ſhould walk acroſs the room with his feet bare. When he cannot do this, he may frequently be ſet on his knees in bed, and ſhould endeavour to paſs his urine as often as he can. When theſe do not ſucceed, a tea-ſpoonful of the ſweet ſpirits of nitre may be occaſionally mixed with his drink. Nothing more certainly relieves the patient, or is more beneficial in the ſmall-pox, than a plentiful diſcharge of urine.

If the mouth be foul, and the tongue dry and chapped, it ought frequently to be waſhed, and the throat gargled with water and honey, ſharpened with a little vinegar or currant jelly.

During the riſing of the ſmall-pox it frequently happens that the patient is eight or ten days without a ſtool. This not only tends to heat and inflame the blood, but the fæces by lodging ſo long in the body, become acrid, and even putrid; from whence bad conſequences muſt enſue. It will therefore be proper when the body is bound, to throw in an emollient clyſter every ſecond or third day, through the whole courſe of the diſeaſe. This will greatly cool and relieve the patient.

When petechiæ, purple, black or livid ſpots, appear among the ſmall pox, the Peruvian bark muſt immediately be adminiſtered in as large doſes as the patient's ſtomach can bear. For a child, two drachms of the

bark in powder may be mixed in three ounces of common water, one ounce of ſimple cinnamon water, and two ounces of the ſyrup of orange or lemon. This may be ſharpened with the ſpirits of vitriol, and a table-ſpoonful of it given every hour. If it be given to an adult in the ſame form, he may take it at leaſt three or four ſpoonfuls every hour. This medicine ought not to be trifled with, but muſt be adminiſtered as frequently as the ſtomach can bear it; in which caſe it will often produce very happy effects. I have frequently ſeen the petechiæ diſappear, and the ſmall-pox, which had a very threatening aſpect, riſe and fill with laudable matter, by the uſe of the bark and acids.

The patient's drink ought likewiſe in this caſe to be generous, as wine or ſtrong negus acidulated with ſpirits of vitriol, vinegar, the juice of lemon, jelly of currants or ſuch like. His food muſt conſiſt of apples, roaſted or boiled, preſerved cherries, plums, and other fruits of an acid nature.

The bark and acids are not only neceſſary when the petechiæ or putrid ſymptoms appear, but likewiſe in the lymphatic or cryſtalline ſmall-pox, where the matter is thin and not duly prepared. The Peruvian bark ſeems to poſſeſs a ſingular power of aſſiſting Nature in preparing laudable pus, or what is called good matter; conſequently it muſt be beneficial both in this and other diſeaſes, where the criſis depends on a ſuppuration. I have often obſerved where the ſmall-pox were flat, and the matter contained in them quite clear and tranſparent, and where at firſt they had the appearance of running into one another, that the Peruvian bark, acidulated as above, changed the colour and conſiſtence of the matter, and produced the moſt happy effects.

When the eruption ſubſides ſuddenly, or as the good women term it, when the ſmall-pox *ſtrike in*, before they have arrived at maturity, the danger is very great. In this caſe bliſtering-plaſters muſt be immediately applied to the wriſts and ancles, and the patient's ſpirits ſupported with cordials.

Sometimes bleeding has a ſurpriſing effect in riſing

the puſtules after they have ſubſided; but it requires ſkill to know when this is proper, or to what length the patient can bear it. Sharp cataplaſms, however, may be applied to the feet and hands; as they tend to promote the ſwelling of the parts, and by that means to draw the humours towards the extremities.

The moſt dangerous period of this diſeaſe is what we call the ſecondary fever. This generally comes on when the ſmall-pox begin to blacken, or turn on the face; and moſt of thoſe who die of the ſmall-pox are carried off by this fever.

Nature generally attempts, at the turn of the ſmall pox, to relieve the patient by looſe ſtools. Her endeavours this way are by no means to be counteracted, but promoted, and the patient at the ſame time ſupported by food and drink of a nouriſhing and cordial nature.

If, at the approach of the ſecondary fever, the pulſe be very quick, hard, and ſtrong, the heat intenſe, and the breathing laborious, with other ſymptons of an inflammation of the breaſt, the patient muſt immediately be bled. The quantity of blood to be let muſt be regulated by the patient's ſtrength, age, and the urgency of the ſymptons.

But in the ſecondary fever, if the patient be feveriſh, the puſtles become ſuddenly pale, and if there be great coldneſs of the extremities, bliſtering-plaſters muſt be applied, and the patient muſt be ſupported with generous cordials. Wine, and even ſpirits, have ſometimes been given in ſuch caſes with amazing ſucceſs.

As the ſecondary fever is in great meaſure, if not wholly, owing to the abſorption of the matter, it would ſeem highly conſonant to reaſon, that the puſtules, as ſoon as they come to maturity, ſhould be opened, This is every day practiſed in other phlegmons which tend to ſuppuration; and there ſeems to be no cauſe why it ſhould be leſs proper here. On the contrary, we have reaſon to believe that by this means the ſecondary fever might always be leſſened, and often wholly prevented.

The puſtules ſhould be opened when they begin to turn of a yellow colour. Very little art is neceſſary for

this operation. They may either be opened with a lancet, or a needle, and the matter abſorded by a little dry lint. As the puſtules are generally firſt ripe on the face, it will be proper to begin with opening theſe, and the others in courſe as they become ripe. The puſtules generally fill again a ſecond or even a third time; for which cauſe the operation may be repeated, or rather continued, as long as there is any conſiderable appearance of matter in the puſtules.

We have reaſon to believe that this operation, rational as it is, has been neglected from a piece of miſtaken tenderneſs is parents. They believe that it muſt give great pain to the poor child; and, therefore, would rather ſee it die then have it thus tortured. This notion, however, is entirely without foundation. I have frequently opened the puſtules when the patient did not ſee me, without his being in the leaſt ſenſible of it; but ſuppoſe it were attended with a little pain, that is nothing in compariſon to the advantages which may ariſe from it.

Opening the puſtules not only prevents the reſorption of the matter into the blood, but likewiſe takes off the tenſion of the ſkin, and by that means greatly relieves the patient. It likewiſe tends to prevent the pitting, which is a matter of no ſmall importance. Acrid matter, by lodging long in the puſtules, cannot fail to corrode the tender ſkin; by which many a handſome face becomes ſo deformed as hardly to bear a reſemblance to the human figure *.

It is generally neceſſary, after the ſmall-pox are gone off, to purge the patient. If, however, the body has been open through the whole courſe of the diſeaſe, or if butter-milk and other things of an opening nature have been drank freely after the height of the ſmall-pox, purging becomes leſs neceſſary; but it ought never wholly to be neglected.

* Though this operation can never do harm, yet it is only necessary when the patient has a great deal of small-pox, or when the matter which they contain is of so thin and acrid a nature, that there is reason to apprehend bad consequences from its being quickly resorbed, or taken up again into the mass of circulating humours.

For very young children, an infusion of senna and prunes, with a little rhubarb, may be sweetened with coarse sugar, and given in small quantities till it operates. Those who are farther advanced must take medicines of a sharper nature. For example, a child of five or six years of age may take eight or ten grains of fine rhubarb in powder overnight, and the same quantity of jalap in powder next morning. This may be wrought off with fresh broth or water gruel, and may be repeated three or four times, five or six days intervening between each dose. For children further advanced, and adults, the dose must be increased in proportion to the age and constitution *.

When imposthumes happen after the small-pox, which is not seldom the case, they must be brought to suppuration as soon as possible, by means of ripening poultices; and when they have been opened or have broke of their own accord, the patient must be purged. The Peruvian bark and milk diet will likewise be useful in this case.

When a cough, a difficulty of breathing, or other symptons of a consumption, succeed to the small-pox, the patient must be sent to a place where the air is good, and put upon a course of asses milk, with such exercise as he can bear. For further directions in this case, see the article *Consumptions*.

OF INOCULATION.

Though no disease, after it is formed, baffles the power of medicine more effectually than the small-pox, yet more may be done before hand to render this disease favourable than any one we know, as almost all the danger from it may be prevented by inoculation. This salutary invention has been known in Europe above half a century; but, like most other useful discoveries,

* I have of late been accustomed, after the small-pox, to give one, two, three, or five grains of calomel, according to the age of the patient, over night, and to work it off next morning with a suitable dose of jalap. Or the jalap and calomel may be mixed together, and given in the morning.

it has till of late made but ſlow progreſs. It muſt, however, be acknowledged, to the honour of this country, that inoculation has met with a more favourable reception here than among any of our neighbours. It is ſtill, however, far from being general, which we have reaſon to fear will be the caſe, as long as the practice continues in the hands of the faculty.

No diſcovery can be of general utility, while the practice of it is kept in the hands of a few. Had the inoculation of the ſmall-pox been introduced as a faſhion, and not as a medical diſcovery, or had it been practiſed by the ſame kind of operators here, as it is in thoſe countries from whence we learned it, it had long ago been univerſal. Fears, jealouſies, prejudices, and oppoſite intereſts are, and ever will be, the moſt effectual obſtacles to the progreſs of any ſalutary diſcovery. Hence it is that the practice of inoculation never became in any meaſure general, even in England, till taken up by men not bred to phyſic. Theſe have not only rendered the practice more extenſive, but likewiſe more ſafe, and by acting under leſs reſtraint than the regular practitioners, have taught them that the patient's greateſt danger aroſe, not from the want of care, but from the exceſs of it.

They know very little of the matter, who impute the ſucceſs of modern inoculators, to any ſuperior ſkill, either in preparing the patient, or communicating the diſeaſe. Some of them, indeed, from a ſordid deſire of engroſſing the whole practice to themſelves, pretend to have extraordinary ſecrets of noſtrums for preparing perſons for inoculation, which never fail of ſucceſs. But this is only a pretence calculated to blind the ignorant and inattentive. Common ſenſe and prudence alone are ſufficient, both in the choice of the ſubject and management of the operation. Whoever is poſſeſſed of theſe may perform this office for his children whenever he finds it convenient, provided they be in a good ſtate of health.

This ſentiment is not the reſult of theory, but of obſervation. Though few phyſicians have had more op-

portunities of trying inoculation in all its different forms, ſo little appears to me to depend upon theſe, generally reckoned of important circumſtances, of preparing the body, communicating the infection by this or the other method, &c. that for ſeveral years paſt, I have perſuaded the parents or nurſes to perform the whole themſelves, and have found that method followed with equal ſucceſs, while it is free from many inconveniences that attend the other *.

The ſmall-pox may be communicated in a great variety of ways with nearly the ſame degree of ſafety and ſucceſs. In Turkey, from whence we learned the practice, the women communicate the diſeaſe to children, by opening a bit of the skin with a needle, and putting into the wound a little matter taken from a ripe puſtule. On the coaſt of Barbary, they paſs a wet thread with the matter through the skin between the thumb and fore-finger; and in ſome of the ſtates of Barbary, inoculation is performed by rubbing in the variolous matter between the thumb and fore-finger, or on other parts of the body. The practice of communicating the ſmall-pox, by rubbing the variolous matter upon the skin, has been long known in many parts of Aſia and Europe, as well as in Barbary, and has generally gone

* A critical situation, too often to be met with, first put me upon trying this method. A gentleman who had lost all his children except one son, by the natural small-pox, was determined to have him inoculated. He told me his intention, and desired I would persuade the mother and grandmother, &c. of its propriety but that was impossible; they were not to be persuaded; and either could not get the better of their fears, or were determined against conviction. It was always a point with me not to perform the operation without the consent of the parties concerned. I therefore advised the father, after giving is son a dose or two of rhubarb to go to a patient who had the small-pox of a good kind, to open two or three of the pustules, taking up the matter with a little cotton, and as soon as he came home to take his son apart, and give his arm a slight scratch with a pin, afterwards to rub the place well with the cotton, and take no farther notice of it. All this he punctually performed; and at the usual period the small-pox made their appearance, which were of an exceeding good kind, and so mild as not to confine the boy an hour to his bed. None of the other relations knew but the disease had come in the natural way, till the boy was well.

by the name of *buying the ſmall-pox*. This cuſtom has long been prevalent in Wales

The preſent method of inoculating in Britain is to make two or three ſlanting inciſions in the arm, ſo ſuperficial as not to pierce quite through the ſkin, with a lancet, wet with freſh matter taken from a ripe puſtule; afterwards the wounds are closed up, and left without any dreſſing. Some make uſe of a lancet covered with the dry matter; but this is leſs certain, and ought never to be uſed, unleſs where freſh matter cannot be obtained: when this is the caſe, the matter ought to be moiſtened, by holding the lancet for ſome time in the ſteam of warm water *.

Indeed, if freſh matter be applied long enough to the ſkin, there is no occaſion for any wound at all. Let a bit of thread about half an inch long, wet with the matter, be immediately applied to the arm, midway between the ſhoulder and the elbow, and covered with a piece of the common ſticking plaſter, and kept on for eight or ten day. This will ſeldom fail to communicate the diſeaſe. We mention this method, becauſe many people are afraid of a wound; and doubtleſs the more eaſily the operation can be performed, it has the greater chance to become general. Some people imagine that the diſcharge from a wound leſſens the eruption; but there is no great ſtreſs to be laid on this notion; beſides, deep wounds often ulcerate and become troubleſome.

We do not find that inoculation is at all conſidered as a medical operation in thoſe countries from whence we learned it. In Turkey it is performed by the women, and in the Eaſt Indies by the brahmins or prieſts. In this country the cuſtom is ſtill in its infancy; we make no doubt, however, but it will ſoon become ſo familiar, that parents will think no more of inoculating their children, than at preſent they do of giving them a purge.

* Mr. Tronchin communicates this diſeaſe by a little bit of thread dipt in the matter, which he covers with a ſmall ſtickening plaſter. This method may no doubt be uſed with advantage in thoſe caſes where the patient is very much alarmed at the ſight of any cutting inſtrument.

No ſet of men have it ſo much in their power to render the practice of inoculation general as the clergy, the greateſt oppoſition to it ſtill ariſing from ſome ſcruples of conſcience which they alone can remove. I would recommend it to them not only to endeavour to remove the religious objections which weak minds may have to this ſalutary practice, but to enjoin it as a duty and to point out the danger of neglecting to make uſe of a mean which providence has put in our power, for ſaving the lives of our offſpring. Surely ſuch parents as willfully neglect the means of ſaving their children's lives, are as guilty as thoſe who put them to death. I wiſh this matter were duly weighed. No one is more ready to make allowance for human weakneſs and regious prejudices; yet I cannot help recommending it in the warmeſt manner, to parents to conſider how great an injury they do their childreng by neglecting to give them this diſeaſe in the early period of life.

The numerous advantages ariſing from the inoculation of the ſmall-pox have been pretty fully pointed out by the learned Dr. M'Kenzie in his Hiſtory of Health*.

* "Many and great," says this humane author, "are the dangers attending the natural infection, from all which the inoculation is quite secure. The natural infection may invade weak or distempered bodies, by no means disposed for its kindly reception. It may attack them at a season of the year either violently hot or intensely cold. It may be communicated from a sort of small-pox impregnated with the utmost virulence. It may lay hold upon people unexpectedly, when a dangerous sort is imprudently imported into a maritime place. It may surprise us soon after excesses commited in luxury, intemperance, or lewdness. It may likewise seize on the innocent after indispensable watchings, hard labour, or necessary journeys. And is it a trivial advantage, that all these unhappy circumstances can be prevented by inoculation? By inoculation numbers are saved from deformity as well as from death. In the natural small-pox, how often are the finest features, and the most beautiful complexions, miserably disfigured? Whereas inoculation rarely leaves any ugly marks of scars, even where the numbers of pustules on the face has been very considerable, and the symptoms by no means favourable. And many other grievous complaints that are frequently subsequent to the natural sort, seldom follow the artificial. Does not inoculation also prevent those inexpressible terrors that perpetually harass persons who never had this disease, insomuch that when the small-pox is epidemical, en-

To thoſe mentioned by the doctor we ſhall only add, that ſuch as have not had the ſmall-pox in the early period of life, are not only rendered unhappy, but likewiſe in a great meaſure unfit for ſuſtaining many of the moſt uſeful and important offices. Few people would chuſe even to hire a ſervant who had not had the ſmall-pox, far leſs to purchaſe a ſlave who had the chance of dying of this diſeaſe. How could a phyſician or a ſurgeon, who had never had the ſmall-pox himſelf, attend others under that malady? How deplorable is the ſituation of females, who arrive at mature age without having had the ſmall-pox! A woman with child ſeldom ſurvives this diſeaſe, and if an infant happen to be ſeized with the ſmall-pox upon the mother's breaſt, who has not had the diſeaſe herſelf, the ſcene muſt be diſtreſſing! If ſhe continue to ſuckle the child, it is at the peril of her own life; and if ſhe wean it, in all probability it will periſh. How often is the affectionate mother forced to leave her houſe, and abandon her children, at the very time when her care is moſt neceſſary? Yet, ſhould parental affection get the better of her fears, the conſequences would often prove fatal. I have known the tender mother and her ſucking infants laid in the ſame grave, both untimely victims to this dreadful malady. But theſe are ſcenes too ſhocking even to mention. Let parents who run away with

tire villages are depopulated, markets ruined, and the face of diſtreſs ſpread over the whole country? From this terror it arises, that juſtice is frequently poſtponed, or diſcouraged, at ſeſſions or aſſiſes where the ſmall-pox rages. Witneſſes and juries dare not appear; and by reaſon of the neceſſary abſence of ſome gentlemen, our honourable and uſeful judges are not attended with that profound reverence and ſplendour due to their office and merit. Does not inoculation, in like manner, prevent our brave ſailors from being ſeized with this diſtemper on ſhipboard, where they muſt quickly ſpread the infection among ſuch of the crew who never had it before, and where they have ſcarce any chance to eſcape, being half ſtifled with the cloſeneſs of their cabins, and but very indifferently nurſed? Laſtly, with regard to the ſoldiery, the miſeries attending theſe poor creatures when attacked by the ſmall-pox on a march, are inconceivable, without attendance, without lodgings, without accommodation; ſo that one of three commonly periſhes."

their children to avoid the ſmall-pox, or who refuſe to inoculate them in infancy, conſider to what deplorable ſituations they may be reduced by this miſtaken tenderneſs!

As the ſmall-pox is now become an epidemical diſeaſe in moſt parts of the known world, no other choice remains but to render the malady as mild as poſſible. This is the only manner of extirpation now left in our power; and though it may ſeem paradoxical, the artificial method of communicating the diſeaſe, could it be rendered univerſal, would amount to nearly the ſame thing as rooting it out. It is a matter of ſmall conſequence, wether a diſeaſe be entirely extirpated, or rendered ſo mild as neither to deſtroy nor hurt the conſtitution; but that this may be done by inoculation, does not now admit of a doubt. The numbers who die under inoculation hardly deſerve to be named. In the natural way, one in four or five generally dies; but by inoculation, not one in a thouſand. Nay, ſome can boaſt of having inoculated ten thouſand without the loſs of a ſingle patient.

I have often wiſhed to ſee ſome plan eſtabliſhed for rendering this ſalutary practice univerſal; but am afraid I ſhall never be ſo happy. The difficulties indeed are many; yet the thing is by no means impracticable. The aim is great: no leſs than ſaving the lives of one fourth part of mankind. What ought not to be attempted in order to accompliſhed ſo deſirable an end?

The firſt ſtep towards rendering the practice univerſal muſt be to remove the religious prejudices againſt it. This, as already obſerved, can only be done by the clergy. They muſt not only recommend it as a duty to others, but likewiſe practice it on their own children. Example will ever have more influence than precept.

The next thing requiſite, is to put it in the power of all. For this purpoſe, we would recommend it to the Faculty to inoculate the children of the poor *gratis*. It is hard that ſo uſeful a part of mankind ſhould, by their poverty, be excluded from ſuch a benefit.

Should this fail, it is ſurely in the power of any ſtate to render the practice general, at leaſt as far as their do-

minion extends. We do not mean that it ought to be enforced by a law. The beſt way to promote it would be to employ a ſufficient number of operators at the public expence to inoculate the children of the poor. This would only be neceſſary till the practice became general; afterwards cuſtom, the ſtrongeſt of all laws, would oblige every individual to inoculate his children to prevent reflections.

It may be objected to this ſcheme, that the poor would refuſe to employ the inoculators: this difficulty is eaſily removed. A ſmall premium to enable mothers to attend their children while under the diſeaſe, would be a ſufficient inducement; beſides, the ſucceſs attending the operation would ſoon baniſh all objections to it. Even conſiderations of profit would induce the poor to embrace this plan. They often bring up their children to the age of ten or twelve, and when they come to be uſeful, they are ſnatched away by this malady, to the great loſs of their parents, and detriment of the public.

The Britiſh legiſlature has of late years ſhewn great attention to the preſervation of infant-lives, by ſupporting the Foundling hoſpital, &c. But we will venture to ſay, if one-tenth part of the ſums laid out in ſupporting that inſtitution, had been beſtowed towards promoting the practice of inoculation of the ſmall-pox among the poor, that not only more uſeful lives had been ſaved, but the practice, ere now, rendered quite univerſal in this iſland. It is not to be imagined what effect example and a little money will have upon the poor; yet, if left to themſelves they would go on for ever in the old way, without thinking of any improvement. We only mean this as a hint to the humane and public ſpirited. Should ſuch a ſcheme be approved, a proper plan might eaſily be laid down for the execution of it.

But as public plans are very difficult to bring about, and often, by the ſelfiſh views and miſconduct of thoſe entruſted with the execution of them, fail of anſwering the noble purpoſes for which they were deſigned; we ſhall, therefore, point out ſome other method by which the benefits of inoculation may be extended to the poor.

There is no doubt but inoculators will daily become more numerous. We would, therefore, have every parish in Britain to allow one of them a small annual salary for inoculating all the children of the parish at a proper age. This might be done at a very trifling expence, and it would enable every one to enjoy the benefit of this salutary invention.

Two things chiefly operate to prevent the progress of inoculation. The one is a wish to put the evil day as far off as possible. This is a principle in our nature; and as inoculation seems rather to be anticipating a future evil, it is no wonder mankind are so averse to it. But this objection is sufficiently answered by the success. Who in his senses would not prefer a lesser evil to-day to a greater tomorrow, provided they were equally certain?

The other obstacle is the fear of reflection. This has a very great weight with the bulk of mankind: Should the child die, they think the world would blame them. This they cannot bear. Here lies the difficulty, and, till that be removed, inoculation will make but small progress. Nothing however can remove it but custom. Make the practice fashionable, and all objections will soon vanish. It is fashion alone that has led the multitude since the beginning of the world, and will lead them to the end. We must, therefore, call upon the more enlightened part of mankind to set a pattern to the rest. Their example, though it may for some time meet with opposition, will at length prevail.

I am aware of an objection to this practice from the expence with which it may be attended; this is easily obviated. We do not mean that every parish ought to employ a Sutton and a Dimsdale as inoculators. These have by their success already recommended themselves to crowned heads, and are beyond the vulgar reach; but have not others an equal chance to succeed? They certainly have. Let them make the same trial, and the difficulties will soon vanish. There is not a parish, and hardly a village in Britain, destitute of some person who can bleed. But this is a far more difficult operation,

and requires both more ſkill and dexterity than inoculation.

The perſons to whom we would chiefly recommend the performance of this operation are the clergy. Moſt of them know ſomething of medicine. Almoſt all of them bleed, and can order a purge, which are the qualifications neceſſary for the practice of inoculation. The prieſts among the leſs enlightened Indians perform this office, and why ſhould a Chriſtian teacher think himſelf above it? Surely the bodies of men, as well as their ſouls, merit a part of the paſtor's care; at leaſt the greateſt Teacher whoever appeared among men, ſeems to have thought ſo.

Should all other methods fail, we would recommend it to perſons to perform the operation themſelves. Let them take any method of communicating the diſeaſe they pleaſe; provided the ſubjects be healthy, and of a proper age, they will ſeldom fail to ſucceed to their wiſh. I have known many inſtances, even of mothers performing the operation, and never ſo much as heard of one bad conſequence. A planter in one of the Weſt India iſlands is ſaid to have inoculated with his own hand, in one year, three hundred of his ſlaves, who, notwithſtanding the warmth of the climate, and other unfavourable circumſtances, all did well. Common mechanics, have often, to my knowledge, performed the operation with as good ſucceſs as phyſicians. We do not, however, mean to diſcourage thoſe who have it in their power, from employing perſons of ſkill to inoculate their children, and attend them while under the diſeaſe; but only to ſhew, that where ſuch cannot be had, the operation ought not, upon that account, to be neglected.

Inſtead of multiplying arguments to recommend this practice, I ſhall beg leave to mention the method which I took with my own ſon, then an only child. After giving him two gentle purges, I ordered the nurſe to take a bit of thread which had been previouſly wet with freſh matter from a pock, and to lay it upon his arm, covering it with a piece of ſticking-plaſter. This

remained on ſix or ſeven days, till it was rubbed off by accident. At the uſual time the ſmall-pox made their appearence, and were exceeding favourable Surely this, which is all that is generally neceſſary, may be done without any skill in medicine.

We have been the more full on this ſubject, becauſe the benefits of inoculation cannot be extended to ſociety by any other means than making the practice general. While it is confined to a few, it muſt prove hurtful to the whole. By means of it the contagion is ſpread, and is communicated to many who might otherwiſe never have had the diſeaſe. Accordingly it is found that nearly the ſame number die of the ſmall-pox now as before inoculation was introduced; and this important diſcovery, by which alone more lives may be ſaved than by all the endeavours of the Faculty, is in a great meaſure loſt by its benefits not being extended to the whole community *.

The ſpring and autumm have been uſually reckoned the moſt proper ſeaſons for inoculation, on account of the weather being then moſt temperate; but it ought to be conſidered that theſe are generaliy the moſt unhealthy ſeaſons of the whole year. Undoubtedly the beſt preparation for the diſeaſe is a previous good ſtate of health. I have always obſerved that children in particular are more ſickly toward the end of ſpring and autumn that any other time of the year. On this account, as well as for the advantage of cool air, I would propoſe winter as the moſt proper ſeaſon for inoculation; though on every other conſideration, the ſpring would ſeem to be preferable.

The most proper age for inoculation is between three and five. Many approve of inoculating on the breast, and where no circumstances forbid this practice, I have no objection to it. Children, however, are more liable to convulſions at this time than afterwards; beſides, the anxiety of the mother or nurſe, ſhould the child be in

* By a well-laid plan for extending inoculation, more lives might be saved at a small expence, than are at present preserved by all the hospitals in England, which cost the public such an amazing sum.

danger, would not fail to heighten it by ſpoiling the milk.

Children who have conſtitutional diſeaſes, muſt nevertheleſs be inoculated. It will often mend the habit of body; but ought to be performed at a time when they are moſt healthy. Accidental diſeaſes ſhould always be removed before inoculation.

It is generally thought neceſſary to regulate the diet for ſome time before the diſeaſe be communicated. In children, however, great alteration in diet is ſeldom neceſſary, their food being commonly of the moſt ſimple and wholeſome kind, as milk, pap, water-pap, weak broths, bread, light pudding, mild roots, and white meats.

But children who have been accuſtomed to a hotter diet, who are of a groſs habit, or abound with bad humours, ought to be put on a ſpare diet before they are inoculated. Their food ſhould be of a light cooling nature, and their drink whey, butter-milk, and ſuch like.

We would recommend no other medicinal preparation, but two or three mild purges, which ought to be ſuited to the age and ſtrength of the patient. The ſucceſs of inoculators does not depend on the preparation of their patients, but on their management of them while under the diſeaſe. Their conſtant care is to keep them cool, and their bodies gently open, by which means the fever is kept low, and the eruption greatly leſſened. The danger is ſeldom great when the puſtules are few, and their number is generally in proportion to the fever which precedes and attends the eruption. Hence the chief ſecret of inoculation conſiſts in regulating the eruptive fever, which generally may be kept ſufficiently low by the methods above mentioned.

The regimen during the diſeaſe is in all reſpects the ſame as under the natural ſmall-pox. The patient muſt be kept cool, his diet ſhould be light, and his drink weak and diluting, &c. Should any bad ſymptoms appear, which is ſeldom the caſe, they muſt be treated in the ſame way as directed for the natural ſmall-pox. Purging is not leſs neceſſary after the ſmall-pox by ino-

culation, than in the natural way, and ought by no means to be neglected.

Inoculation, beneficial as it is, would have been of much more extenſive and eſſential benefit, had it become the faſhion for people in general to perform it themſelves, without having recourſe to profeſſional aſſiſtance. In India, where it is performed by the bramins, not one in a million fails to receive the infection, or ſuffers from it the leaſt injury. Were this example followed by the clergy of Europe, the practice would become univerſal, and innumerable lives be ſaved. This humane act is, however, practiſed by ſome of our clergy, whoſe example it is to be hoped may have an influence on the venerable body in general, and lead them to walk in the ſteps of their great Maſter, who —went about curing diſeaſes.

Much as the intereſted part of the faculty exert themſelves in keeping this beneficial operation in their own hands, experience ſhews that it requires no profeſſional knowledge, nor any medicine to be adminiſtered either previous or poſtérior to the operation, and that a proper regimen and abſtinence from certain articles that may prove injurious, is all that is requiſite. What uſed to be formerly ſo general, of preparing the body, as it was called, that is, reducing its ſtrength by repeated doſes of phyſic, cannot fail to be injurious inſtead of being beneficial. Common ſenſe tells us that a perſon in full health is always beſt prepared to meet a diſeaſe. One perfectly well attempting to make himſelf better, is prepoſterous in the higheſt degree; and, as we have ſo often had occaſion to obſerve, nothing can be ſo hurtful to the conſtitution as making the belly a druggiſt's ſhop.

The clergy have it certainly moſt in their power to render inoculation univerſal, but ſhould they decline this benevolent office, every encouragement ſhould be given to induce mothers to perform it themſelves; a moderate premium would at firſt have this effect, and in a ſhort time experience and example would render the practice general, and ſuperſede the neceſſity of any pecuniary inducement. Even at this day, when the ma-

nagement of the patient under this diſorder has in a conſiderable degree reduced the number of its victims, we ſtill ſee many left by its ravages as ſpectacles of deformity; many ruined in their conſtitution, and not a few loſing their lives. Were the practice of inoculation univerſal, which it never can be while deemed a medical operation, all the evils attending the ſmall-pox would ſpeedily diſappear.

The introduction of the *Cow-Pox*, if by experience it prove a complete and infallible preventive againſt the ſmall-pox, is doubtleſs an improvement of immenſe importance. The invention and promulgation of a diſcovery, which combines eaſe, ſafety, and ſimplicity, deſerves the higheſt praiſe; and patroniſed as it is by the moſt diſtinguiſhed medical characters, we may fondly expect in its general adoption the complete abolition of a diſeaſe which has heretofore proved ſo fatal to mankind.——This ſubject, however, will be fully treated of in a ſeparate Chapter, which will be found in a ſubſequent part of this work.

CHAP. XXIV.

OF THE MEASLES.

THE meaſles appeared in Europe about the ſame time with the ſmall-pox, and have a great affinity to that diſeaſe. They both came from the ſame quarter of the world, are both infectious, and ſel dom attack the ſame perſon more than once. The meaſles are moſt common in the ſpring ſeaſon, and generally diſappear in ſummer. The diſeaſe itſelf, when properly managed, ſeldom proves fatal: but its conſequences are often very troubleſome.

CAUSE.——This diſeaſe, like the ſmall-pox, proceeds from infection, and is more or leſs dangerous, according to the conſtition of the patient, the ſeaſon of the year, the climate, &c.

SYMPTOMS.——The meaſles, like other fevers, are preceded by alternate fits of heat and cold, with ſickneſs and loſs of appetite. The tongue is white, but generally moiſt. There is a ſhort cough, a heavineſs of the head and eyes, drowſineſs, and a running at the noſe. Sometimes, indeed, the cough does not come before the eruption has appeared. There is an inflammation and heat in the eyes, accompanied with a defluxion of ſharp rheum, and great acuteneſs of ſenſation, ſo that they cannot bear the light without pain. The eye-lids frequently ſwell ſo as to occaſion blindneſs. The patient generally complains of his throat; and a vomiting or looſeneſs often precedes the eruption. The ſtools in children are commonly greeniſh; they complain of an itching of the skin, and are remarkably peviſh. Bleeding at the noſe is common, both before and in the progreſs of the diſeaſe.

About the fourth day, ſmall ſpots, reſembling fleabites, appear, firſt upon the face, then upon the breaſt, and afterwards on the extremities; theſe may be diſtinguiſhed from the ſmall-pox by their ſcarcely riſing above the ſkin. The fever, cough, and difficulty of breathing, inſtead of being removed by the eruption, as in the ſmall-pox, are rather increaſed; but the vomiting generally ceaſes.

About the ſixth or ſeventh day from the time of ſickening, the meaſles begin to turn pale on the face, and afterwards upon the body; ſo that by the ninth day they entirely diſappear. The fever, however, and difficulty of breathing, often continue, eſpecially if the patient has been kept upon too hot a regimen. Petechiæ, or purple ſpots, may likewiſe be occaſioned by this error.

A violent looſeneſs ſometimes ſucceeds the meaſles; in which caſe the patient's life is in imminent danger.

Such as die of the meaſles, generally expire about the ninth day from the invaſion, and are commonly carried off by a peripneumony, or inflammation of the lungs.

The moſt favourable ſymptoms are a moderate looſeneſs, a moiſt ſkin, and a plentiful diſcharge of urine.

When the eruption ſuddenly falls in, and the patient is ſeized with a delirium, he is in the greateſt danger. If the meaſles turn too ſoon of a pale colour, it is an unfavourable ſymptom, as are alſo great weakneſs, vomiting, reſtleſſneſs, and difficulty of ſwallowing. Purple or black ſpots appearing among the meaſles, are very unfavourable. When a continual cough, with hoarſeneſs, ſucceeds the diſeaſe, there is reaſon to ſuſpect an approaching conſumption of the lungs.

Our buſineſs in this diſeaſe is to aſſiſt Nature, by proper cordials, it throwing out the eruption, if her efforts be too languid, but when they are too violent, they muſt be reſtrained by evacuations, and cool diluting liquors, &c. We ought likewiſe to endeavour to appeaſe the moſt urgent ſymptoms, as the cough, reſtleneſs, and difficulty of breathing.

REGIMEN.——The cool regimen is neceſſary here as well as in the ſmall-pox. The food too muſt be light, and the drink diluting. Acids, however, do not anſwer ſo well in the meaſles as in the ſmall-pox, as they tend to exaſperate the cough. Small-beer likewiſe, though a good drink in the ſmall-pox, is here improper. The moſt ſuitable liquors are decoctions of liquorice with marſhmallow roots and ſarſaparilla, infuſions of linſeed or of the flowers of elder, balm tea, clarified whey, barley-water, and ſuch like. Theſe, if the patient be coſtive, may be ſweetened with honey; or, if that ſhould diſagree with the ſtomach, a little manna may occaſionally be added to them.

MEDICINE.——The meaſles being an inflammatory diſeaſe, without any critical diſcharge of matter, as in the ſmall-pox, bleeding is commonly neceſſary, eſpecially when the fever runs high, with difficulty of breathing, and great oppreſſion of the breaſt. But if the diſeaſe be of a mild kind, bleeding may be omitted †.

Bathing the feet and legs frequently in lukewarm water, both tends to abate the violence of the fever, and to promote the eruption.

† I do not know any diſeaſe wherein bleeding is more neceſſary than in the meaſles, eſpecially when the fever runs high; in this caſe I have always found it relieve the patient.

The patient is often greatly relieved by vomiting. When there is a tendency this way, it ought to be promoted by drinking lukewarm water, or weak camomile tea.

When the cough is very troubleſome, with dryneſs of the throat, and difficulty of breathing, the patient may hold his head over the ſteam of warm water, and draw the ſteam into his lungs.

He may likewiſe lick a little ſpermaceti and ſugar-candy pounded together: or take now and then a ſpoonful of the oil of ſweet almonds, with ſugar-candy diſſolved in it. Theſe will ſoften the throat, and relieve the tickling cough.

If at the turn of the diſeaſe the fever aſſumes new vigour, and there appears great danger of ſuffocation, the patient muſt be bled according to his ſtrength, and bliſtering-plaſters applied, with a view to prevent the load from being thrown on the lungs, where, if an inflammation ſhould fix itſelf, the patient's life will be in imminent danger.

In caſe the measles ſhould ſuddenly diſappear, it will be neceſſary to purſue the ſame method which we have recommended when the ſmall-pox recede The patient muſt be ſupported with wine and cordials. Bliſtering-plaſters muſt be applied to the legs and arms, and the body rubbed all over with warm flannels. Warm poultices may likewiſe be applied to the feet and palms of the hands.

When purple or black ſpots appear, the patient's drink ſhould be ſharpened with ſpirits of vitriol; and if the putrid ſymptoms increaſe, the Peruvian bark muſt be adminiſtered in the ſame manner as directed in the ſmall-pox.

Opiates are ſometimes neceſſary, but ſhould never be given except in caſes of extreme reſtleſſneſs, a violent looſeneſs, when the cough is very troubleſome. For children, the ſyrup of popies is ſufficient. A tea-ſpoonful or two may be occaſionally given, according to the patient's age, or the violence of the ſymptoms.

After the meaſles are gone off, the patient ought to be purged. This may be conducted in the ſame manner as directed in the ſmall-pox.

If a violent looſeneſs ſucceed the meaſles, it may be checked by taking for ſome days a gentle doſe of rhubarb in the morning, and an opiate over night; but if theſe do not remove it, bleeding will ſeldom fail to have that effect.

Patients recovering after the meaſles ſhould be careful what they eat or drink. The food for ſome time ought to be light and in ſmall quantities, and their drink diluting, and rather of an opening nature, as butter milk, whey, and ſuch like. They ought alſo to beware of expoſing themſelves too ſoon to the cold air, leſt a ſuffocating catarrh, an aſthma, or a conſumption of the lungs, ſhould enſue.

Should a cough, with difficulty of breathing, and other ſymptoms of a conſumption, remain after the meaſles, ſmall quantities of blood may be frequently let at proper intervals, as the patient's ſtrength and conſtitution will permit. He ought likewiſe to drink aſſes' milk, to remove to a free air, if in a large town, and to ride daily on horſeback. He muſt keep cloſe to a diet conſiſting of milk and vegetables; and laſtly, if theſe do not ſucceed, let him remove to a warmer climate †.

† Attempts have been made to communicate the measles, as well as the small-pox, by inoculation, and we make no doubt but in time the practice may succeed. Dr. Home of Edinburgh says, he communicated the disease by the blood. Others have tried this method, and have not found it succeed. Some think the disease would be more certainly communicated by rubbing the skin of a patient who has the measles with cotton, and afterwards applying the cotton to a wound as in the small-pox; while others recommend a bit of flannel which had been applied to the patient's skin all the time of the disease, to be afterwards laid upon the arm or leg of the person to whom the infection is to be communicated. There is no doubt but this disease, as well as the small-pox, may be communicated various ways; the most probable, however, is either from cotton rubbed upon the skin, as mentioned above, or by introducing a little of the sharp humour which distils from the eyes of the patient into the blood. It is agreed on all hands, that such patients as have been inoculated had the disease very mildly; we therefore wish the practice were more general, as the measles have of late become very fatal.

OF THE SCARLET FEVER.

The ſcarlet fever is ſo called from the colour of the patient's skin, which appears as if it were tinged with red wine. It happens at any ſeaſon of the year, but is moſt common towards the end of ſummer, at which time it often ſeizes whole families: children and young perſons are moſt ſubject to it.

It begins like other fevers with coldneſs and ſhivering, without any violent ſickneſs. Afterwards the skin is covered with red ſpots, which are broader, more florid, and leſs uniform than the meaſles. They continue two or three days, and then diſappear; after which the cuticle, or ſcarf-skin, falls off.

There is ſeldom any occaſion for medicine in this diſeaſe. The patient ought, however, to keep within doors, to abſtain from fleſh, ſtrong liquors and cordials, and to drink freely of cool diluting liquors. If the fever runs high, the body muſt be kept gently open by emollient clyſters, or ſmall doſes of nitre and rhubarb. A ſcruple of the former, with five grains of the latter, may be taken thrice a-day, or oftener, if neceſſary.

Children and young perſons are ſometimes ſeized at the beginning of this diſeaſe with a kind of ſtupor and epileptic fits. In this caſe, the feet and legs ſhould be bathed in warm water, a large bliſtering plaſter applied to the neck, and a doſe of the ſyrup of poppies given every night till the patient recovers †.

The ſcarlet, fever, however, is not always of ſo mild a nature. It is ſometimes attended with putrid or malignant ſymptoms, in which caſe it is always dangerous. In the malignant ſcarlet fever, the patient is not only affected with coldneſs and ſhivering, but with languor, ſickneſs, and great oppreſſion; to theſe ſucceed exceſſive heat, nauſea, and vomiting, with a ſoreneſs of the throat; the pulſe is extremely quick, but ſmall and depreſſed; the breathing frequent and laborious; the skin

† Sydenham.

not, but not quite dry; the tongue moiſt, and covered with a whitiſh mucus; the tonſils inflamed and ulcerated. When the eruption appears, it brings no relief: on the contrary, the ſymptoms generally grow worſe, and freſh ones come on, as purging, delirium, &c.

When this diſeaſe is miſtaken for a ſimple inflammation, and treated with repeated bleedings, purging and cooling medicines, it generally proves fatal. The only medicines that can be depended on in this caſe, are cordials and antiſeptics, as the Peruvian bark, wine, ſnake-root, and the like. The treatment muſt be in general ſimilar to that of the putrid fever, or of the malignant ulcerous ſore throat *.

OF THE BILIOUS FEVER.

When a continual, remitting, or intermitting fever is accompanied with a frequent or copious evacuation of bile, either by vomit or ſtool, the fever is denominated bilious. In Britain the bilious fever generally makes its appearance about the end of ſummer and ceaſes towards the approach of winter. It is moſt frequent and fatal in warm countries, eſpecially where the ſoil is marſhy, and when great rains are ſucceeded by ſultry heats. Perſons who work without doors, lie in camps, or who are expoſed to the night air, are moſt liable to this kind of fever.

If there are ſymptoms of inflammation at the beginning of this fever, it will be neceſſary to bleed, and to put the patient upon the cool diluting regimen recommended in the inflammatory fever. The ſaline draught may likewiſe be frequently adminiſtered, and the patient's body be kept open by clyſters and mild purga-

* In the year 1774, during winter, a very bad ſpecies of this fever prevailed in Edinburgh. It raged chiefly among young people. The eruption was generally accompanied with a quinſey, and the inflammatory ſymptoms were ſo blendid with other of a putrid nature, as to render the treatment of the diſeaſe very difficult. Many of the patients, towards the decline of the fever, were afflicted with large ſwelling of the ſubmaxillary glands, and not a few had a ſuppuration in one or both ears.

tives. But if the fever ſhould remit or intermit, bleeding will ſeldom be neceſſary. In this caſe a vomit may be adminiſtered, and, if the body be bound, a gentle purge; after which the Peruvian bark will generally complete the cure.

In caſe of a violent looſeneſs, the patient muſt be ſupported with chicken broths, jellies of hartſhorn, and the like; and he may uſe the *white decoction* for his ordinary drink *. If a bloody flux ſhould accompany this fever, it muſt be treated in the manner recommended under the article *Dyſentery*.

When there is a burning heat, and the patient does not ſweat, that evacuation may be promoted by giving him, three or four times a-day, a table ſpoonful of Mindererus's ſpirit † mixed in a cup of his ordinary drink.

If the bilious fever be attended with the nervous, malignant, or putrid ſymptoms, which is ſometimes the caſe, the patient muſt be treated in the ſame manner as directed under theſe diſeaſes.

After this fever, proper care is neceſſary to prevent a relapſe. For this purpoſe the patient, eſpecially towards the end of autumn, ought to continue the uſe of the Peruvian bark for ſome time after he is well. He ſhould likewiſe abſtain from all traſhy fruits, new liquors, and every kind of flatulent aliment.

We cannot forbear here repeating, what we have ſo often endeavoured to inculcate, namely, the impoſſibility of preſcribing for a fever, without attending to the particulars of the patient's caſe. Not only can no general rule or univerſal medicine be recommended, but the moſt able phyſician cannot pretend to preſcribe for a perſon in this diſeaſe, without perſonally judging of the patient's ſituation. Bleeding may certainly be beneficial when the ſymptoms run high, with a full hard pulſe, and other ſigns of inflammation; but to judge of this requires the beſt medical ſkill.

* See Appendix, *White Decoction.*

† See Appendix, *Spirit of Mindererus.*

CHAP. XXV.

OF THE ERYSIPELAS, OR ST. ANTHONY'S FIRE.

THIS diſeaſe, which in ſome parts of Britain is called *the roſe*, attacks perſons at any period of life, but is moſt common between the age of thirty and forty. Perſons of a ſanguine or plethoric habit are moſt liable to it. It often attacks young people, and pregnant women; and ſuch as have once been afflicted with it are very liable to have it again. Sometimes it is a primary diſeaſe, and at other times only a ſymptom of ſome other malady. Every part of the body is liable to be attacked by an eryſipelas, but it moſt frequently ſeizes the legs or face, eſpecially the latter. It is moſt common in autumn, or when hot weather is ſucceeded by cold and wet.

CAUSES.——The eryſipelas may be occaſioned by violent paſſions or affections of the mind; as fear, anger, &c. When the body has been heated to a great degree, and is immediately expoſed to the cold air, ſo that the perſpiration is ſuddenly checked, an eryſipelas will often enſue*. It may alſo be occaſioned by drinking to exceſs, by continuing too long in a warm bath, or by any thing that overheats the blood. If any of the natural evacuations be obſtructed, or in too ſmall quantity, it may cauſe an eryſipelas. The ſame effect will follow from the ſtoppage of artificial evacuations; as iſſues, ſetons, or the like.

SYMPTOMS.——The eryſipelas attacks with a ſhivering, thirſt, loſs of ſtrength, pain in the head and

* The country people in many parts of Britain call this disease a *blast*, and imagine it proceeds from foul air, or ill-wind, as they term it. The truth is, they often lie down to rest them, when warm and fatigued, upon the damp ground, where they fall asleep, and lie so long as to catch cold, which occasions the erysipelas. This disease may indeed proceed from other causes, but we may venture to say, that nine times out of ten it is occasioned by cold caught after the body has been greatly heated or fatigued.

back, heat, reſtleſsneſs, and a quick pulſe; to which may be added vomiting and ſometimes a delirium. On the ſecond, third, or fourth day, the part ſwells, becomes red, and ſmall puſtules appear, at which time the fever generally abates.

When the eryſipelas ſeizes the foot, the parts contiguous ſwell, the ſkin ſhines; and, if the pain be violent it will aſcend to the leg, and will not bear to be touched.

When it attacks the face, it ſwells, appears red, and the ſkin is covered with ſmall puſtles filled with clear water. One or both eyes are generally cloſed with a ſwelling; and there is a difficulty of breathing. If the mouth and noſtrils be very dry, and the patient drowſy, there is reaſon to ſuſpect an inflammation of the brain.

If the eryſipelas affects the breaſt, it ſwells and becomes exceedingly hard, with great pain, and is apt to ſuppurate. There is a violent pain in the arm-pit on the ſide affected, where an abſceſs is often formed.

If in a day or two the ſwelling ſubſides, the heat and pain abate, the colour of the part turns yellow, and the cuticle breaks and falls off in ſcales, the danger is over.

This diſeaſe ſeldom proves fatal: yet when the habit is impaired, and the legs ſwell to an enormous ſize, the complaint then becomes difficult of cure: much, however, depends upon the conſtitution of the patient. To perſons far advanced in years, and of a ſcorbutic habit, and whoſe humours are tainted by a bad courſe of diet, it has ſometimes proved incurable.

When the eryſipelas is large, deep, and affects a very ſenſible part of the body, the danger is great. If the red colour changes into a livid or black, it will end in a mortification. Sometimes the inflammation cannot be diſcuſſed, but comes to a ſuppuration; in which caſe fiſtulas, a gangrene, or a mortification, often enſue.

Such as die of this diſeaſe are commonly carried off by the fever, which is attended with difficulty of breathing, and ſometimes with a delirium and great drowſineſs. They generally die about the ſeventh or eighth day.

REGIMEN.——In the eryſipelas the patient muſt neither be kept too hot nor too cold, as either of theſe extremes will tend to make it retreat, which is always to be guarded againſt. When the diſeaſe is mild, it will be ſufficient to keep the patient within doors, without confining him to his bed, and to promote the perſpiration by diluting liquors, &c.

The diet ought to be ſlender, and of a moderately cooling and moiſtening quality, as groat-gruel, panado, chicken or barley broth, with cooling herbs and fruits, &c. avoiding fleſh, fiſh, ſtrong drink, ſpices, pickles, and all other things that may heat and inflame the blood; the drink may be barley water, an infuſion of elder flowers, common whey, and ſuch like.

But if the pulſe be low, and the ſpirits ſunk, the patient muſt be ſupported with negus, and other things of a cordial nature. His food may be ſago-gruel, with a little wine and nouriſhing broths, taken in ſmall quantities, and often repeated. Great care, however, muſt be taken not to overheat him.

MEDICINE.——In this diſeaſe much miſchief is often done by medicine, eſpecially by external applications. People, when they ſee an inflammation, immediately think that ſomething ought to be applied to it. This indeed is neceſſary in large phlegmons; but in an eryſipelas the ſafer courſe is to apply nothing. Almoſt all ointments, ſalves, and plaiſters, being of a greaſy nature, tend rather to obſtruct and repel, than promote any diſcharge from the part. At the beginning of this diſeaſe, it is neither ſafe to promote a ſuppuration, nor to repel the matter too quickly. The eryſipelas in many reſpects reſembles the gout, and is to be treated with the greateſt caution. Fine wool, or very ſoft flannel, are the ſafeſt applications to the part. Theſe not only defend it from the external air, but likewiſe promote the perſpiration, which has a great tendency to carry off the diſeaſe. In Scotland the common people generally apply a mealy cloth to the parts affected, which is far from being improper.

It is common to bleed in the eryſipelas; but this

likewiſe requires caution. If, however, the fever be high, the pulſe hard and ſtrong, and the patient vigorous, it will be proper to bleed; but the quantity muſt be regulated by theſe circumſtances, and the operation repeated as the ſymptoms may require. If the patient has been accuſtomed to ſtrong liquors, and the diſeaſe attacks his head, bleeding is abſolutely neceſſary.

Bathing the feet and legs frequently in lukewarm water, when the diſeaſe attacks the face or brain, has an excellent effect. It tends to make a derivation from the head, and ſeldom fails to relieve the patient. When bathing proves ineffectual, poultices, or ſharp ſinapiſms, may be applied to the ſoles of the feet for the ſame purpoſe.

In caſes where bleeding is requiſite, it is likewiſe neceſſary to keep the body open. This may be effected by emollient clyſters, or ſmall doſes of nitre and rhubarb. Some indeed recommend very large doſes of nitre in the eryſipelas, but nitre ſeldom ſits eaſy on the ſtomach when taken in large doſes. It is, however, one of the beſt medicines when the fever and inflammation run high. Half a drachm of it, with four or five grains of rhubarb, may be taken in the patient's ordinary drink ſeveral times a-day.

When the eryſipelas leaves the extremities, and ſeizes the head, ſo as to occaſion a delirium or ſtupor, it is abſolutely neceſſary to open the body. If clyſters and mild purgatives fail to have this effect, ſtronger ones muſt be given. Bliſtering plaſters muſt likewiſe be applied to the neck, or behind the ears, and ſharp cataplaſms laid to the ſoles of the feet.

When the inflammation cannot be diſcuſſed, and the part has a tendency to ulcerate, it will then be proper to promote ſuppuration, which may be done by the application of ripening poultices, with ſaffron, warm fomentations, and ſuch like.

When the black, livid, or blue colour of the part ſhews a tendency to mortification, the Peruvian bark muſt be adminiſtered. It may be taken along with acids, as recommended in the ſmall-pox, or in any other form

more agreeable to the patient. It must not, however, be trifled with, as the patient's life is at stake. A drachm may be given every two hours, if the symptoms be threatening, and cloths dipped in warm camphorated spirits of wine, or the tincture of myrrh and aloes, may be applied to the part, and frequently renewed. It may likewise be proper in this case to apply poultices of the bark, or to foment the part affected with a strong decoction of it.

In what is commonly called the *scorbutic erysipelas*, which continues for a considerable time, it will only be necessary to give gentle laxatives, and such things as purify the blood and promote the perspiration. Thus, after the inflammation has been checked by opening medicines, the decoction of woods † may be drank, after which a course of bitters will be proper.

Such as are liable to frequent attacks of the erysipelas, ought carefully to guard against all violent passions; to abstain from strong liquors, and all fat, viscid, and highly nourishing food. They should likewise take sufficient exercise, carefully avoiding the extremes of heat or cold. Their food should consist chiefly of milk, and such fruits, herbs, and roots, as are of a cooling quality; and their drink ought to be small beer, whey, butter-milk, and such like. They should never suffer themselves to be long costive. If that cannot be prevented by suitable diet, it will be proper to take frequently a gentle dose of rhubarb, cream of tartar, the lenitive electuary, or some other mild purgative.

The applications so constantly recurred to, of poultices, embrocations, and fomentations, in cases of erysipelas, are generally hurtful, and can only be serviceable where the suppuration is inevitable. Absorbents to take up the moisture and cool the skin are greatly preferable, and for this purpose we would recommend hair powder, spread on a soft rag, and laid over the parts affected two or three times a-day; an application attended with no danger, and extremely gratifying to the patient.

† See Appendix, Decoction of Woods.

Eryſipelas, when driven from the part affected, is apt to fly to another, where it may be more dangerous. Applications, eſpecially violent ones, for its removal, ſhould be uſed with caution, and not without proper advice. There is not wanting inſtances of its being expelled the face, and fixing on other parts, where it has proved fatal.

CHAP. XXVI.

OF THE PHRENITIS, OR INFLAMMATION OF THE BRAIN.

THIS is ſometimes a primary diſeaſe, but oftener only a ſymptom of ſome other malady; as the inflammatory, eruptive, or ſpotted fever, &c. It is very common, however, as a primary diſeaſe in warm climates, and is moſt incident to perſons about the prime or vigour of life. The paſſionate, the ſtudious, and thoſe whoſe nervous ſyſtem is irritable in a high degree, are moſt liable to it.

CAUSES.———This diſeaſe is often occaſioned by night watching, eſpecially when joined with hard ſtudy; it may likewiſe proceed from hard drinking, anger, grief, or anxiety. It is often occaſioned by the ſtoppage of uſual evacuations; as the bleeding piles in men, the cuſtomary diſcharges of women, &c. Such as imprudently expoſe themſelves to the heat of the ſun, eſpecially by ſleeping without doors in a hot ſeaſon, with their heads uncovered, are often ſuddenly ſeized with an inflammation of the brain, ſo as to awake quite delirious. When repellents are imprudently uſed in an eryſipelas, an inflammation of the brain is ſometimes the conſequence. It may likewiſe be occaſioned by external injuries, as blows or bruiſes upon the head, &c.

SYMPTOMS.—The ſymptoms which uſually precede a true inflammation of the brain are, pain of the head, redneſs of the eyes, a violent flushing of the face, diſturbed ſleep, or a total want of it, great dryneſs of the

ſkin, coſtiveneſs, a retention of urine, a ſmall dropping of blood from the noſe, ſinging of the ears, and extreme ſenſibility of the nervous ſyſtem.

When the inflammation is formed, the ſymptoms in general are ſimilar to thoſe of the inflammatory fever. The pulſe indeed, is often weak, irregular, and trembling; but ſometimes it is hard and contracted. When the brain itſelf is inflamed, the pulſe is always ſoft and low; but when the inflammation only affects the integuments of the brain, viz. the dura and pia mater, it is hard. A remarkable quickneſs of hearing is a common ſymptom of this diſeaſe; but that ſeldom continues long. Another uſual ſymptom is a great throbbing or pulſation in the arteries of the neck and temples. Though the tongue is often black and dry, yet the patient ſeldom complains of thirſt, and even refuſes drink. The mind chiefly runs upon ſuch objects as have before made a deep impreſſion on it; and ſometimes, from a ſullen ſilence, the patient becomes all of a ſudden quite outrageous.

A conſtant trembling and ſtarting of the tendons is on unfavourable ſymtom, as are alſo a ſuppreſſion of urine; a total want of ſleep; a conſtant ſpitting; a grinding of the teeth; which laſt may be conſidered as a kind of convulſion. When a phrenitis ſucceeds an inflammation of the lungs, of the inteſtines, or of the throat, &c. it is owing to a tranſlation of the diſeaſe from theſe parts to the brain, and generally proves fatal. This ſhews the neceſſity of proper evacuations, and the danger of repellents in all inflammatory diſeaſes.

The favourable ſymptoms are, a free perſpiration, a copious diſcharge of blood from the noſe, the bleeding piles, a plentiful diſcharge of urine, which lets fall a copious ſediment. Sometimes this diſeaſe is carried off by a looſeneſs, and in women by an exceſſive flow of the menſes.

As this diſeaſe often proves fatal in a few days, it requires the moſt ſpeedy applications. When it is prolonged or improperly treated, it ſometimes ends in madneſs, or a kind of ſtupidity, which continues for life.

In the cure, two things are chiefly to be attended to, viz. to leſſen the quantity of blood in the brain, and to retard the circulation towards the head.

REGIMEN.——The patient ought to be kept very quiet. Company, noiſe, and every thing that affects the ſenſes, or diſturbs the imagination, increaſes the diſeaſe. Even too much light is hurtful: for which reaſon the patient's chamber ought to be a little darkened, and he ſhould neither be kept too hot nor cold. It is not, however, neceſſary to exclude the company of an agreeable friend, as this has a tendency to ſoothe and quiet the mind. Neither ought the patient to be kept too much in the dark, leſt it ſhould occaſion a gloomy melancholy, which is often the conſequence of this diſeaſe.

The patient muſt, as far as poſſible, be ſoothed and humoured in every thing. Contradiction will ruffle his mind and increaſe his malady. Even when he calls for things which are not to be obtained, or which might prove hurtful, he is not to be poſitively denied them, but rather put off with the promiſe of having them as ſoon as they can be obtained, or by ſome other excuſe. A little of any thing that the mind is ſet upon, though not quite proper, will hurt the patient leſs than a poſitive refuſal. In a word, whatever he was fond of, or uſed to be delighted with, when in health, may here be tried; as pleaſing ſtories, ſoft muſic, or whatever has a tendency to ſoothe the paſſions, and compoſe the mind. Boerhave propoſes ſeveral mechanical experiments for this purpoſe; as the ſoft noiſe of water diſtilling by drops into a baſon, and the patient trying to reckon them, &c. Any uniform ſound, if low and continued, has a tendency to procure ſleep, and conſequently may be of ſervice.

The aliment ought to be light, conſiſting chiefly of farinaceous ſubſtances; as panado and water-gruel, ſharpened with jelly of currants, or juice of lemons, ripe fruits roaſted or boiled, jellies, preſerves, &c. The drink ſmall, diluting, and cooling; as whey, barley-water, or decoctions of barley and tamarinds, which latter not only render the liquor more palatable, but are more beneficial, as they are of an opening nature.

MEDICINE.—In an inflammation of the brain, nothing more certainly relieves the patient than a free diſcharge of blood from the noſe. When this comes of its own accord, it is by no means to be ſtopped, but rather promoted, by applying cloths dipped in warm water to the part. When bleeding at the noſe does not happen ſpontaneouſly, it may be provoked by putting a ſtraw, or any other ſharp body, up the noſtril.

Bleeding in the temporal arteries greatly relieves the head; but as this operation cannot always be performed, we would recommend in its ſtead bleeding in the jugular veins. When the patient's pulſe and ſpirits are ſo low that he cannot bear bleeding with the lancet, leeches may be applied to the temples. Theſe not only draw off the blood more gradually, but by being applied to the part affected, generally give more immediate relief.

A diſcharge of blood from the hæmorrhoidal veins is likewiſe of great ſervice, and ought by all means to be promoted. If the patient has been ſubject to the bleeding piles, and that diſcharge has been ſtopped, every method muſt be tried to reſtore it; as the application of leeches to the parts, ſitting over the ſteams of warm water, ſharp clyſters, or ſuppoſitories made of honey, aloes, and rock ſalt.

If the inflammation of the brain be occaſioned by the ſtoppage of evacuations either natural or artificial, as the menſes, iſſues, ſetons, or ſuch like. all means muſt be uſed to reſtore them as ſoon as poſſible, or to ſubſtitute others in their ſtead.

The patient's body muſt be kept open by ſtimulating clyſters or ſmart purges; and ſmall quantities of nitre ought frequently to be mixed with his drink. Two or three drachms, or more, if the caſe be dangerous, may be uſed in the ſpace of twenty-four hours.

The head ſhould be ſhaved, and frequently rubbed with vinegar and roſe-water. Cloths dipped in this mixture may likewiſe be applied to the temples. The feet ought freqently to be bathed in lukewarm water, and ſoft poultices of bread and milk may be kept conſtantly applied to them.

If the diſeaſe proves obſtinate, and does not yield to theſe medicines, it will be neceſſary to apply a bliſtering-plaſter to the whole head.

The inflammation requires particular attention that the patient be kept as eaſy, compoſed, and tranquil as poſſible; and an attentive and ſenſible nurſe will here frequently be found as ſerviceable as the moſt enlightened phyſician. The ſmalleſt irritation, even light, noiſe, or any thing that may ſuddenly or ſtrongly impreſs the ſenſes, is carried ſo rapidly to the brain, as to increaſe the inflammation, and diſorder even the organs by which it was conveyed.

CHAP. XXVII.

OF THE OPTHALMIA, or INFLAMMATION OF THE EYES.

THIS diſeaſe may be occaſioned by external injuries: as blows, burns, bruiſes, and the like. It may likewiſe proceed from duſt, quicklime, or other ſubſtances, getting into the eyes. It is often cauſed by the ſtoppage of cuſtomary evacuations; as the healing of old ſores, drying up of iſſues, the ſuppreſſing of gentle morning ſweats, or of the ſweating of the feet, &c. Long expoſure to the night air, eſpecially in cold northerly winds, or whatever ſuddenly checks the perſpiration, eſpecially after the body has been much heated, is very apt to cauſe an inflammation of the eyes. Viewing ſnow or other white bodies for a long time, or looking ſteadfaſtly at the ſun, a clear fire, or any bright object, will likewiſe occaſion this malady. A ſudden tranſition from darkneſs to very bright light will often have the ſame effect.

Nothing more certainly occaſions an inflammation of the eyes than night-watching, eſpecially reading or writing by candle light. Drinking ſpirituous liquors, and exceſs of venery, are likewiſe very hurtful to the eyes. The acrid fumes of metals, and of ſeveral kinds of fuel, are alſo pernicious. Sometimes an inflamma-

ion of he eyes proceeds from a venereal taint, and of- e- from a ſcrophulous or gouty habit. It may likewiſe e occaſioned by hairs in the eye-lids turning inwards, nd hurting the eyes. Sometimes the diſeaſe is epide- nic, eſpecially after wet ſeaſons; and I have frequently known it prove infectious, particularly to thoſe who lived in the ſame houſe with the patient. It may be occaſioned by moiſt air, or living in low damp houſes, eſpecially in perſons who are not accuſtomed to ſuch ſituations. In children it often proceeds from imprudently drying up of ſcabbed heads, a running behind the ears, or any other diſcharge of that kind. Inflammations of the eyes often ſucceed the ſmall-pox or meaſles, eſpecially in children of a ſcrophulous habit.

SYMPTOMS.—An inflammation of the eyes is attended with acute pain, heat, redneſs, and ſwelling. The patient is not able to bear the light, and ſometimes he feels a pricking pain, as if his eyes were pierced with a thorn. Sometimes he imagines his eyes are full of motes, or thinks he ſees flies dancing before him. The eyes are filled with a ſcalding rheum, which ruſhes forth in great quantities, whenever the patient attempts to look up. The pulſe is generally quick and hard, with ſome degree of fever. When the diſeaſe is violent, the neighbouring parts ſwell, and there is a throbbing or pulſation in the temporal arteries, &c.

A ſlight inflammation of the eyes, eſpecially from an external cauſe, is eaſily cured; but when the diſeaſe is violent and continues long, it often leaves ſpecks upon the eyes, or dimneſs of ſight, and ſometimes blindneſs.

If the patient be ſeized with a looſeneſs, it has a good effect; and when the inflammation paſſes from one eye to another, as it were by infection, it is no favourable ſymptom. But when the diſeaſe is accompanied with a violent pain in the head, and continues long, the patient is in danger of loſing his ſight.

REGIMEN.—The diet, unleſs in ſcrophulous caſes, can hardly be too ſpare, eſpecially at the beginning. The patient muſt abſtain from every thing of a heating nature. His food ſhould conſiſt chiefly of mild vegetables, weak broths, and gruels. His drink may

be barley water, balm tea, common whey, and ſuch like.

The patient's chamber muſt be darkened, or his eyes ſhaded by a cover, ſo as to exclude the light, but not to preſs upon the eyes. He ſhould not look at a candle, the fire, or any luminous object; and ought to avoid all ſmoke, as the fumes of tobacco, or any thing that may cauſe coughing, ſneezing, or vomiting. He ſhould be kept quiet, avoiding all violent efforts, either of body or mind, and encouraging ſleep as much as poſſible.

MEDICINE.—This is one of thoſe diſeaſes wherein great hurt is often done by external applications. Almoſt every perſon pretends to be poſſeſſed of a remedy for the cure of ſore eyes. Theſe remedies generally conſiſt of eye-waters and ointments, with other external applications, which do miſchief twenty times for once they do good. People ought therefore to be very cautious how they uſe ſuch things, as even the preſſure upon the eyes often encreaſes the malady.

Bleeding, in a violent inflammation of the eyes, is always neceſſary. This ſhould be performed as near the part affected as poſſible. An adult may loſe ten or twelve ounces of blood from the jugular vein, and the operation may be repeated according to the urgency of the ſymptoms. If it ſhould not be convenient to bleed in the neck, the ſame quantity may be let from the arm, or any other part of the body.

Leeches are often applied to the temples, or under the eyes, with good effect. The wounds muſt be ſuffered to bleed for ſome hours, and if the bleeding ſtop ſoon, it may be promoted by the application of cloths dipt in warm water. In obſtinate caſes, it will be neceſſary to repeat this operation ſeveral times.

Opening and diluting medicines are by no means to be neglected. The patient may take a ſmall doſe of Glauber's ſalts and cream of tartar, every ſecond or third day, or a decoction of tamarinds with ſenna. If theſe be not agreeable, gentle doſes of rhubarb and nitre, a little lenitive electuary, or any other mild purgative, will anſwer the ſame end. The patient at the

ne time muſt drink freely of water gruel, tea, whey, any other weak diluting liquor .He ought likewiſe take at bed time a large draught of very weak wine ey, in order to promote perſpiration. His feet and gs muſt frequently be bathed in lukewarm water, and s head ſhaved twice or thrice a-week, and afterwards ſhed in cold water. This has often a remarkably od effect.

If the inflammation does not yield to theſe evacuaons, bliſtering plaſters muſt be applied to the temples, hind the ears, or upon the neck, and kept open for me time by the mild bliſtering ointment. I have ſelom known theſe, if long enough kept open, fail to reove the moſt obſtinate inflammation of the eyes; but r this purpoſe it is often neceſſary to continue the ſcharge for ſeveral weeks.

When the diſeaſe has been of long ſtanding, I have en very extraordinary effects from a ſeton in the ck, or between the ſhoulders, eſpecially the latter. ſhould be put upwards and downwards, or in the diction of the ſpine, and in the middle between the oulder blades. It may be dreſſed twice a-day with llow baſilicon. I have known patients who had been ind for a conſiderable time, recover their ſight by eans of a ſeton placed as above. When the ſeton is t acroſs the neck, it ſoon wears out, and is both ore painful and troubleſome than between the ſhoulrs; beſides, it leaves a diſagreeable mark, and does t diſcharge ſo freely.

When the heat and pain of the eyes are very great, poultice of bread and milk, ſoftened with ſweet oil or eſh butter may be applied to them, at leaſt all night; d they may be bathed with lukewarm milk and wa- r in the morning.

If the patient cannot ſleep, which is ſometimes the ſe, he may take twenty or thirty drops of laudonum, two ſpoonfuls of the ſyrup of poppies every night, ore or leſs according to his age, or the violence of e ſymptoms.

After the inflammation is gone off, if the eyes ſtill main weak and tender, they may be bathed every

night and morning with cold water and a little brandy, ſix parts of the former to one of the latter. A method ſhould be contrived, by which the eye may be quite immerſed in the brandy and water, and where it ſhould be kept for ſome time. I have generally found this, or cold water and vinegar, as good a ſtrengthener of the eyes as any of the moſt celebrated collyriums.

When an inflammation of the eyes proceeds from a ſcrophulous habit, it generally proves very obſtinate. In this caſe the patient's diet muſt not be too low, and he may be allowed to drink ſmall negus, or now and then a glaſs of wine. The moſt proper medicine is the Peruvian bark, which may either be given in ſubſtance, or prepared in the following manner:

Take an ounce of the bark in powder, with two drams of Winter's bark, and boil them in an Engliſh quart of water to a pint; when it has boiled near long enough, and half an ounce of liquorice root ſliced. Let the liquor be ſtrained. Two, three, or four table ſpoonfuls, according to the age of the patient, may be taken three or four times a-day. It is impoſſible to ſay how long this medicine ſhould be continued, as the cure is ſooner performed in ſome than in others; but, in general, it requires a conſiderable time to produce any laſting effects.

Dr. Cheyne ſays "that Æthiops mineral never fails in obſtinate inflammations of the eyes, even ſcrophulous ones, if given in a ſufficient doſe, and duly perſiſted in." There is no doubt but this and other preparations of mercury may be made of ſingular ſervice in ophthalmias of long continuance, but they ought always to be adminiſtered with the greateſt caution, or by perſons of skill in phyſic.

It will be proper frequently to look into the eyes, to ſee if any hairs be turned inwards, or preſſing upon them †. Theſe ought to be removed by plucking them out with a pair of ſmall pincers.

† Any foreign body lodged in the eye may be expeditiously removed by paſſing a ſmall hair pencil between the eyelid and the ball of the eye. In ſome places the peaſants do this very effectually, by using their tongue in the ſame manner.

Thoſe who are liable to frequent returns of this diſeaſe, ought conſtantly to have an iſſue in one or both arms. Bleeding or purging in the ſpring and autumn will be very beneficial to ſuch perſons. They ought likewiſe to live with the greateſt regularity, avoiding ſtrong liquor, and every thing of a heating quality. Above all, let them avoid the night air and late ſtudies *.

Among the numerous claſſes of quacks, the oculiſts or *eye-doctors* hold a very prominent rank; but, like their brethren in other diſorders, often in the end totally deſtroy the organ they pretended to cure. Without being acquainted with the ſtructure of the eye, they boldly adminiſter the ſame remedy, and perform the ſame ſurgical operation of ſcarifying, ſcratching, and cutting, whether the inflammation proceeds from a ſcrophulous habit or ſpecific infection.

CHAP. XXVIII.

OF THE QUINSEY, OR INFLAMMATION OF THE THROAT.

THIS diſeaſe is very common in Britain, and is frequently attended with great danger. It prevails in the winter and ſpring, and is moſt fatal to young people of a ſanguine temperature.

CAUSES.——In general it proceeds from the ſame cauſes as other inflammatory diſorders, viz. an obſtructed perſpiration, or whatever heats and inflames the blood. An inflammation of the throat is often occaſioned by omitting ſome part of the covering uſually worn about the neck, by drinking cold liquor when the body is warm, by riding or walking againſt a cold northerly wind, or any thing that greatly cools the throat, and parts adjacent. It may likewiſe pro-

* As moſt people are fond of using eye-waters and ointments in this and other diſeaſes of the eyes, we have inſerted ſome of the moſt approved forms of theſe medicines in the Appendix. See Appendix, *Eye-water* and *Eye-ſalve*.

ceed from the neglect of bleeding, purging, or any cuſtomary evacuation.

Singing, ſpeaking aloud and long, or whatever ſtrains the throat, may likewiſe cauſe an inflammation of that organ. I have often known the quinſey prove fatal to jovial companions, who, after ſitting long in a warm room, drinking hot liquors, and ſinging with vehemence, were ſo imprudent as to go abroad in the cold night air. Sitting with wet feet, or keeping on wet clothes, are very apt to occaſion this malady. It is likewiſe frequently occaſioned by continuing long in a moiſt place, ſitting near an open window, ſleeping in a damp bed, ſitting in a room that has been newly plaſtered, &c. I know people who never fail to have a ſore throat if they ſit even but a ſhort time in a room that has been lately waſhed.

Acrid or irritating food may likewiſe inflame the throat, and occaſion a quinſey. It may alſo proceed from bones, pins, or other ſharp ſubſtances ſticking in the throat, or from the cauſtic fumes of metals or minerals, as arſenic, antimony, &c. taken in by the breath. This diſeaſe is ſometimes epidemical and infectious.

SYMPTOMS.—The inflammation from the throat is evident from inſpection, the parts appearing red and ſwelled; beſides, the patient complains of pains in ſwallowing. His pulſe is quick and hard, with other ſymptoms of a fever. If blood be let, it is generally covered with a tough coat of a whitiſh colour, and the patient ſpits a tough phlegm. As the ſwelling and inflammation increaſe, the breathing and ſwallowing become more difficult, the pain affects the ears, the eyes generally appear red, and the face ſwells. The patient is often obliged to keep himſelf in an erect poſture, being in danger of ſuffocation; there is a conſtant nauſea or inclination to vomit, and the drink, inſtead of paſſing into the ſtomach, is often returned by the noſe. The patient is ſometimes ſtarved at laſt, merely from an inability to ſwallow any kind of food.

When the breathing is laborious, with ſtraitneſs of the breaſt, and anxiety, the danger is great. Though

the pain in ſwallowing be very great, yet while the patient breathes eaſy, there is not ſo much danger. An external ſwelling is no unfavourable ſymptom; but if it ſuddenly falls, and the diſeaſe affects the breaſt, the danger is very great. When a quinſey is the conſequence of ſome other diſeaſe, which has already weakened the patient, his ſituation is dangerous. A frothing at the mouth, with a ſwelled tongue, a pale, ghaſtly countenance, and coldneſs of the extremities, are fatal ſymptoms.

REGIMEN.—The regimen in this diſeaſe is in all reſpects the ſame as in the pleuriſy, or peripneumony. The food muſt be light and in ſmall quantity, and the drink plentiful, weak, and diluting, mixed with acids.

It is highly neceſſary that the patient be kept eaſy and quiet. Violent affections of the mind, or great efforts of the body may prove fatal. He ſhould not even attempt to ſpeak but in a low voice. Such a degree of warmth as to promote a conſtant, gentle ſweat, is proper. When the patient is in bed, his head ought to be raiſed a little higher than uſual.

It is peculiarly neceſſary that the neck be kept warm, for which purpoſe ſeveral folds of ſoft flannel may be wrapt round it. That alone may often remove a ſlight complaint of the throat, eſpecially if applied in due time. We cannot here omit obſerving the propriety of a cuſtom which prevails among the peaſants of this country. When they feel any uneaſineſs of the throat, they wrap a ſtocking about it all night. So effectual is this remedy, that in many places it paſſes for a charm, and the ſtocking is applied with particular ceremonies; the cuſtom, however, is undoubtedly a good one, and ſhould never be neglected. When the throat has been thus wrapped up all night, it muſt not be expoſed to the cold air through the day, but a handkerchief or a piece of flannel be kept about it till the inflammation be removed.

The jelly of black currants is a medicine very much in eſteem for complaints of the throat, and indeed it is

of ſome uſe. It ſhould be almoſt conſtantly kept in the mouth, and ſwallowed down leiſurely. It may likewiſe be mixed in the patient's, drink or taken any other way. When it cannot be obtained, the jelly of red currants, or of mulberries, may be uſed in its ſtead.

Gargles for the throat are very beneficial. They may be made of ſage tea, with a little vinegar and honey, or by adding to half an Engliſh pint of pectoral decoction, two or three ſpoonfuls of honey, and the ſame quantity of currant jelly. This may be uſed three or four times a-day; and if the patient be troubled with tough viſcid phlegm, the gargle may be rendered more ſharp and cleanſing, by adding to it a tea ſpoonful of the ſpirit of ſal ammoniac. Some recommend gargles made of the decoction of the leaves or bark of the black currant buſh; but where the jelly can be had theſe are unneceſſary.

There is no diſeaſe wherein the benefit of bathing the feet and legs in lukewarm water is more apparent; that practice ought therefore never to be neglected. If people were careful to keep warm, to wrap up their throats with flannel, to bathe their feet and legs in warm water, and to uſe a ſpare diet, with diluting liquors, at the beginning of this diſeaſe, it would ſeldom proceed to a great height, or be attended with any danger; but when theſe precautions are neglected, and the diſeaſe becomes violent, more powerful medicines are neceſſary.

MEDICINE.——An inflammation of the throat being a moſt acute and dangerous diſtemper, which ſometimes takes off the patient very ſuddenly, it will be proper, as ſoon as the ſymptoms appear, to bleed in the arm, or rather in the jugular vein, and to repeat the operation if circumſtances require.

The body ſhould likewiſe be kept gently open. This may either be done, by giving the patient for his ordinary drink a decoction of figs and tamarinds, or ſmall doſes of rhubarb and nitre, as recommended in the eryſipelas. Theſe may be increaſed according to the age of the patient, and repeated till they have the deſired effect.

I have often known very good effects from a bit of al prunel, or purified nitre, held in the mouth, and wallowed down as it melted. This promotes the diſ- harge of ſaliva, by which means it anſwers the end of gargle, while at the ſame time it abates the fever, by romoting the diſcharge of urine.

The throat ought likewiſe to be rubbed twice or hrice a-day with a little of the volatile liniment, This eldom fails to produce ſome good effects. At the ame time the neck ought to be carefully covered with wool or flannel, to prevent the cold from penetrating the ſkin, as this application renders it very tender. Many other external applications are recommended in this diſeaſe, as a ſwallow's neſt, poultices made of the fungus called Jew's ears, album Græcum, &c. But as we do not look upon any of theſe to be preferable to a common poultice of bread and milk, we ſhall take no farther notice of it.

Some recommend the gum guaiacum as a ſpecific in this diſeaſe. Half a drachm of the gum in powder may be made in an electuary with the rob of elder berries, or the jelly of currants for a doſe, and repeated occa- ſionally †.

Bliſtering upon the neck or behind the ears, in vio- lent inflammations of the throat, is very beneficial; and in bad caſes it will be neceſſary to lay a bliſtering- plaſter quite acroſs the throat, ſo as to reach from ear to ear. After the plaſters are taken off, the parts ought to be kept running by the application of iſſue oint- ment, till the inflammation is gone; otherwiſe, upon their drying up, the patient will be in danger of a re- lapſe.

When the patient has been treated as above, a ſup- puration ſeldom happens. This, however, is ſometimes the caſe, in ſpite of all endeavours to prevent it. When the inflammation and ſwelling continue, and it is evi- dent that a ſuppuration will enſue, it ought to be pro- moted by drawing the ſteam of warm water into the throat through a tunnel, or the like. Soft poultices

† Dr. Home.

ought likewiſe to be applied outwardly, and the patient may keep a roaſted fig conſtantly in his mouth.

It ſometimes happens, before the tumour breaks, that the ſwelling is ſo great, as entirely to prevent any thing from getting down into the ſtomach. In this caſe, the patient muſt inevitably periſh, unleſs he can be ſupported in ſome other way. This can only be done by nouriſhing clyſters of broth, or gruel with milk, &c. Patients have often been ſupported by theſe for ſeveral days, till the tumour has broke; and afterwards they have recovered.

Not only the ſwallowing, but the breathing is often prevented by the tumour. In this caſe, nothing can ſave the patient's life, but opening the *trachæa* or windpipe. As that has been often done with ſucceſs, no perſon, in ſuch deſperate circumſtances, ought to heſitate a moment about the operation; but as it can only be performed by a ſurgeon, it is not neceſſary here to give any directions about it.

When a difficulty of ſwallowing is not attended with an acute pain or inflammation, it is generally owing to an obſtruction of the glands about the throat, and only requires that the part be kept warm, and the throat frequently gargled with ſomething that may gently ſtimulate the glands, as a decoction of figs with vinegar and honey; to which may be added a little muſtard, or a ſmall quantity of ſpirits. But this gargle is never to be uſed where there are ſigns of an inflammation. This ſpecies of *angina* has various names among the common people, as *the pap of the throat*, the falling down of the *almonds of the ears*, &c. Accordingly, to remove it, they lift up the patient by the hair of the head, and thruſt their fingers under his jaws, &c. all which practices are at beſt uſeleſs, and often hurtful.

Thoſe who are ſubject to inflammations of the throat, in order to avoid that diſeaſe, ought to live temperate. Such as do not chooſe to obſerve this rule, muſt have frequent recourſe to purging and other evacuations, to diſcharge the ſuperfluous humours. They ought likewiſe to beware of catching cold, and ſhould abſtain

from aliment and medicines of an aſtringent or ſtimulating nature.

Violent exercile, by increaſing the motion and force of the blood, is apt to occaſion an inflammation of the throat, eſpecially if cold liquor be drank immediately after it, or the body ſuffered ſuddenly to cool. Thoſe who would avoid this diſeaſe, ought, therefore, after ſpeaking aloud, ſinging, running, drinking warm liquor, or doing any thing that may ſtrain the throat, or increaſe the circulation of the blood towards it, to take care to cool gradually, and to wrap ſome additional covering about their necks.

I have often known perſons who had been ſubject to ſore throats, entirely freed from that complaint by only wearing a ribband, or a piece of flannel, conſtantly about their necks, or by wearing thicker ſhoes, a flannel waiſtcoat, or the like. Theſe may ſeem trifling, but they have great effect. There is danger indeed in leaving them off after perſons have been accuſtomed to them; but ſurely the inconveniency of uſing ſuch things for life, is not to be compared with the danger which may attend the neglect of them.

Sometimes, after an inflammation, the glands of the throat continue ſwelled, and become hard and callous. This complaint is not eaſily removed, and is often rendered dangerous by the too frequent application of ſtrong ſtimulating and ſtyptic medicines. The beſt method is to keep it warm, and to gargle it twice a-day with a decoction of figs, ſharpened a little with the elixir or ſpirit of vitriol.

OF THE MALIGNANT QUINSEY, OR PUTRID ULCEROUS SORE THROAT.

This kind of quinſey is but little known in the northern parts of Britain, though for ſome time paſt it has been fatal in the more ſouthern counties. Children are more liable to it than adults, females than males, and the delicate than thoſe who are hardy and robuſt. It prevails chiefly in autumn, and is moſt frequent after a long courſe of damp or ſultry weather.

CAUSES.——This is evidently a contagious diſtemper, and is generally communicated by infection. Whole families, and even entire villages, often receive the infection from one perſon. This ought to put people upon the guard againſt going near ſuch patients as labour under the diſorder, as by that means they endanger not only their own lives, but likewiſe thoſe of their friends and connexions. Whatever tends to produce putrid or malignant fevers, may likewiſe occaſion the putrid ulcerous ſore throat, as unwholeſome air, damaged proviſions, neglect of cleanlineſs, &c.

SYMPTOMS.——It begins with alternate fits of ſhivering and heat. The pulſe is quick, but low and unequal, and generally continues ſo through the whole courſe of the diſeaſe. The patient complains greatly of weakneſs and oppreſſion of the breaſt, his ſpirits are low, and he is apt to faint away when ſet upright; he is troubled with a nauſea, and often with a vomiting or purging. The two latter are moſt common in children. The eyes appear red and watery, and the face ſwells. The urine is at firſt pale and crude, but as the diſeaſe advances, it turns more of a yellowiſh colour. The tongue is white, generally moiſt, which diſtinguiſhes this from an inflammatory diſeaſe. Upon looking into the throat, it appears ſwelled and of a florid red colour. Pale or aſh-coloured ſpots, however, are here and there interſperſed, and ſometimes one broad patch or ſpot, of an irregular figure, and pale white colour, ſurrounded with florid red, only appears. Theſe whitiſh ſpots or ſloughs cover ſo many ulcers.

An efflorescence, or eruption upon the neck, arms, breaſt, and fingers, about the ſecond or third day, is a common ſymptom of this diſeaſe. When it appears, the purging and vomiting generally ceaſe.

There is often a ſlight degree of delirium, and the face frequently appears bloated, and the inſide of the noſtrils red and inflamed. The patient complains of a diſagreeable putrid ſmell, and his breath is very offenſive.

The putrid ulcerous ſore throat may be diſtinguiſhed from the inflammatory, by the vomiting and looſeneſs with which is is generally uſhered in; the foul ulcers in the throat covered with a whitiſh or livid coat; and by the exceſſive weakneſs of the patient; with other ſymptoms of a putrid fever.

Unfavourable ſymptoms are, an obſtinate purging, extreme weakneſs, dimneſs of the ſight, a livid or black colour of the ſpots, and frequent ſhiverings, with a weak, fluttering pulſe. If the eruption upon the ſkin ſuddenly diſappears, or becomes of a livid colour, with a diſcharge of blood from the noſe or mouth, the danger is very great.

If a gentle ſweat break out about the third or fourth day, and continue with a flow, firm, and equal pulſe; if the ſlough caſts off in a kindly manner, and appear clean and florid at the bottom; and if the breathing is ſoft and free, with a lively colour of the eyes, there is reaſon to hope for a ſalutary criſis.

REGIMEN.——The patient muſt be kept quiet; and for the moſt part in bed, as he will be apt to faint when taken out of it. His food muſt be nouriſhing and reſtorative, as ſago gruel with wine, jellies, ſtrong broths, &c. His drink ought to be generous, and of an antiſeptic quality, as red wine negus, white wine whey, and ſuch like.

MEDICINE.——The medicine in this kind of quinſey is entirely different from that which is proper in the inflammatory. All evacuations, as bleeding, purging, &c. which weaken the patient, muſt be avoided. Cooling medicines, as nitre and cream of tartar, are likewiſe hurtful. Strengthening cordials alone can be uſed with ſafety, and theſe ought never to be neglected.

If at the beginning there is a great nauſea or inclination to vomit, the patient muſt drink an infuſion of green tea, camomile flowers, or carduus benedictus, in order to cleanſe the ſtomach. If theſe are not ſufficient, he may take a few grains of the powder of ipecacuanha, or any other gentle vomit.

If the diſeaſe be mild, the throat may be gargled with an infuſion of ſage and roſe leaves, to a gill of which may be added a ſpoonful or two of honey, and as much vinegar as will make it agreeably acid; but when the ſymptoms are urgent, the ſloughs large and thick, and the breath very offenſive, the following gargle may be uſed—

To ſix or ſeven ounces of the pectoral decoction, when boiling, add half an ounce of contrayerva root; let it boil for ſome time, and afterwards ſtrain the liquor, to which add two ounces of white wine vinegar, an ounce of fine honey, and an ounce of the tincture of myrrh. This ought not only to be uſed as a gargle, but a little of it ſhould be frequently injected with a ſyringe to clean the throat, before the patient takes any meat or drink. This method is peculiarly neceſſary for children, who cannot uſe a gargle.

It will be of great benefit if the patient frequently receives into his mouth, through an inverted funnel, the ſteams of warm vinegar, myrrh, and honey.

But when the putrid ſymptoms run high, and the diſeaſe is attended with danger, the only medicine that can be depended upon is the Peruvian bark. It may be taken in ſubſtance if the patient's ſtomach will bear it. If not, an ounce of bark, groſsly powdered, with two drachms of Virginian ſnake-root, may be boiled in an Engliſh pint and a half of water to half a pint, to which a tea ſpoonful of the elixir of vitriol may be added, and an ordinary tea cupful of it taken every three or four hours. Bliſtering plaſters are very beneficial in this diſeaſe, eſpecially when the patient's pulſe and ſpirits are low. They may be applied to the throat, behind the ears, or upon the back part of the neck.

Should the vomiting prove troubleſome, it will be proper to give the patient two table ſpoonfuls of the ſaline julep every hour. Tea made of mint and a little cinnamon will be very proper for his ordinary drink, eſpecially if an equal quantity of red wine be mixed with it.

In caſe of a violent looſeneſs, the ſize of a nutmeg of diaſcordium, or the japonic confection, may be taken two or three times a-day, or oftener if neceſſary.

If a diſcharge of blood from the noſe happens, the ſteams of warm vinegar may be received up the noſtrils frequently, and the drink muſt be ſharpened with ſpirits of vitriol, or tincture of roſes.

In caſe of a ſtranguary, the belly muſt be fomented with warm water, and emollient clyſters given three or four times a-day.

After the violence of the diſeaſe is over, the body ſhould ſtill be kept open with mild purgatives, as manna, ſenna, rhubarb, or the like.

If great weakneſs and dejection of ſpirits, or night-ſweats, with other ſymptoms of a conſumption, ſhould enſue, we would adviſe the patient to continue the uſe of the Peruvian bark, with the elixir of vitriol, and to take frequently a glaſs of generous wine. Theſe, together with a nouriſhing diet, and riding on horſeback, are the moſt likely means for recovering his ſtrength.

The quinſey is moſt frequently brought on by expoſing the throat to a current of air, near an open window in a room, or ſtill more in a carriage, eſpecially in cold damp weather, or in the night.

The inflammatory ſore throat may generally be cured in the mode I have mentioned, yet there are caſes where the patient loſes the power of ſwallowing, and dies for want of nouriſhment. A ſurgeon, employed in a caſe of this nature, ſaved his patient by faſtening a tunnel to the ſkin of an eel, open at both ends, and by means of a flexible probe, puſhing one end down the gullet till it entered the ſtomach, by which channel proper ſuſtenance was conveyed.

In the malignant quinſey, or putrid ulcerous ſore throat, not a moment ſhould be loſt in obtaining the beſt medical aſſiſtance; the ſmalleſt delay may be attended with irreparable injury.

CHAP. XXIX.

OF COLDS AND COUGHS.

IT has already been obſerved, that colds are the effect of an obſtructed perſpiration; the common cauſes of which we have likewiſe endeavoured to point out, and ſhall not here repeat them. Neither ſhall we ſpend time in enumerating all the various ſymptoms of colds, as they are pretty generally known. It may not, however, be amiſs to obſerve, that almoſt every cold is a kind of fever, which only differs in degree from ſome of thoſe that have already been treated of.

No age, ſex, or conſtitution, is exempted from this diſeaſe, neither is it in the power of any medicine or regimen to prevent it. The inhabitants of every climate are liable to catch cold, nor can even the greateſt circumſpection defend them at all times from its attacks. Indeed, if the human body could be kept conſtantly in an uniform degree of warmth, ſuch a thing as catching cold would be impoſſible; but as that cannot be effected by any means, the perſpiration muſt be liable to many changes. Some changes, however, when ſmall, do not affect the health; but when great they muſt prove hurtful.

When oppreſſion of the breaſt, a ſtuffing of the noſe, unuſual wearineſs, pain in the head, &c. give ground to believe that the perſpiration is obſtructed, or, in other words, that the perſon has caught cold, he ought immediately to leſſen his diet, at leaſt the uſual quantity of his ſolid food, and to abſtain from all ſtrong liquors. Inſtead of fiſh, fleſh, eggs, milk, and other nouriſhing diet, he may eat light bread pudding, veal or chicken broth, panado, gruel, and ſuch like. His drink may be water gruel mixed with a little honey, an infuſion of balm, or linſeed ſharpened with the juice of Seville orange or lemon; a decoction of barley and liquorice with tamarinds, or any other cool, diluting, acid, liquor.

Above all, his ſupper ſhould be light; as ſmall poſſet, or water-gruel ſweetened with honey, and a little toaſted bread in it. If honey ſhould diſagree with the ſtomach, the gruel may be ſweetened with treacle or coarſe ſugar, and ſharpened with the jelly of currants. Thoſe who have been accuſtomed to generous liquors may take wine-whey inſtead of gruel, which may be ſweetened as above.

The patient ought to lie longer than uſual a-bed and to encourage a gentle ſweat, which is eaſily brought on towards morning by drinking tea, or any kind of warm diluting liquor. I have often known this practice carry off a cold in one day, which in all probability, had it been neglected, would have coſt the patient his life, or have confined him for ſome months. Would people ſacrifice a little time to eaſe and warmth, and practice a modrate degree of abſtinence when the firſt ſymytoms of a cold appear, we have reaſon to believe that moſt of the bad effects which flow from an obſtructed perſpiration might be prevented. But, after the diſeaſe has gathered ſtrength by delay, all attempts to remove it often prove vain. A pleuriſy, a peripneumony, or a fatal conſumption of the lungs, are the common effects of colds which have either been totally neglected, or treated improperly.

Many attempt to cure a cold, by getting drunk: but this, to ſay no worſe of it, is a very hazardous experiment. No doubt it may ſometimes ſucceed, by ſuddenly reſtoring the perſpiration; but when there is any degree of inflammation, which is frequently the caſe, ſtrong liquors, inſtead of removing the malady, will increaſe it. By this means a common cold may be converted into an inflammatory fever.

When thoſe who labour for their daily bread have the misfortune to catch cold, they cannot afford to loſe a day or two, in order to keep themſelves warm, and take a little medicine; by which means the diſorder is often ſo aggravated as to confine them for a long time, or even to render them ever after unable to ſuſtain hard labour. But even ſuch of the labouring poor as can afford to take care of themſelves, are often too hardy to

do it; they affect to deſpiſe colds, and, as long as they can crawl about, ſcorn to be confined by what they call a *common cold*. Hence it is that colds deſtroy ſuch numbers of mankind. Like an enemy diſpiſed, they gather ſtrength from delay, till at length they become invincible. We often ſee this verified in travellers, who rather than loſe a day in the proſecution of their buſineſs, throw away their lives by purſuing their journey, even in the ſevereſt weather, with this diſeaſe upon them.

It is certain, however, that colds may be too much indulged. When a perſon, for every ſlight cold, ſhuts himſelf up in a warm room, and drinks great quantities of warm liquor, it may occaſion ſuch a general relaxation of the ſolids as will not be eaſily removed. It will therefore, be proper, when the diſeaſe will permit, and the weather is mild, to join to the regimen mentioned above, gentle exerciſe; as walking, riding on horſeback, &c. An obſtinate cold, which no medicine can remove, will yield to gentle exerciſe and a proper regimen of the diet.

Bathing the feet and legs in warm water, has a great tendency to reſtore the perſpiration. But care muſt be taken that the water be not too warm, otherwiſe it will do hurt. It ſhould never be much warmer than the blood, and the patient ſhould go immediately to bed after uſing it. Bathing the feet in warm water, lying in bed, and drinking warm water-gruel, or other weak liquors, will ſoon take off a ſpaſm and reſtore the perſpiration, than all the hot ſudorific medicines in the world. This is all that is neceſſary for removing a common cold; and if this courſe be taken at the beginniug, it will ſeldom fail.

But when the ſymptoms do not yield to abſtinence, warmth, and diluting liquors, there is reaſon to fear the approach of ſome other diſeaſe, as an inflammation of the breaſt, an ardent fever, or the like. If the pulſe therefore, be hard and frequent, the ſkin hot and dry, and the patient complains of his head or breaſt, it will, be neceſſary to bleed, and to give the cooling powders recommended in the ſcarlet fever, every three or four hours, till they give a ſtool.

It will likewiſe be proper to put a bliſtering-plaſter on the back, to give two table ſpoonfuls of the ſaline mixture every two hours, and in ſhort to treat the patient in all reſpects as for a ſlight fever. I have often ſeen this courſe, when obſerved at the beginning, remove the complaint in two or three days, when the patient had all the ſymptoms of an approaching ardent fever, or an inflammation of the breaſt.

The chief ſecret of preventing colds lies in avoiding, as far as poſſible, all extremes either of heat or cold, and in taking care when the body is heated to let it cool gradually. Theſe and other circumſtances relating to this important ſubject, are ſo fully treated of under the article *Obſtructed Perſpiration*, that it is needleſs here to reſume the conſideration of them.

OF A COMMON COUGH.

A cough is generally the effect of a cold, which has either been improperly treated, or entirely neglected. When it proves obſtinate there is always reaſon to fear the conſequences, as this ſhews a weak ſtate of the lungs, and is often the forerunner of a conſumption.

If the cough be violent, and the patient young and ſtrong, with a hard quick pulſe, bleeding will be proper; but in weak and relaxed habits, bleeding rather prolongs the diſeaſe. When the patient ſpits freely, bleeding is unneceſſary, and ſometimes hurtful, as it tends to leſſen that diſcharge.

When the cough is not attended with any degree of fever, and the ſpittle is viſcid and tough, ſharp pectoral medicines are to be adminiſtered; as gum ammoniac, ſquills, &c. Two table ſpoonfuls of the ſolution of gum ammoniac may be taken three or four times a-day, more or leſs, according to the age and conſtitution of the patient. Squills may be given various ways; two ounces of the vinegar, the oxymel, or the ſyrup, may be mixed with the ſame quantity of the ſimple cinnamon water, to which may be added an ounce of common water, and an ounce of balſamic ſyrup. Two ta-

ble ſpoonfuls of this mixture may be taken three or four times a-day.

A ſyrup made of equal parts of lemon juice, honey, and ſugar candy, is likewiſe very proper in this kind of cough. A table ſpoonful of it may be taken at pleaſure.

But when the deflexion is ſharp and thin thoſe medicines rather do hurt. In this caſe, gentle opiates, oils, and mucilages, are more proper. A cup of an infuſion of wild poppy leaves, and marſh mallow roots, or the flowers of colt's foot may be taken frequently; or a tea ſpoonful of the paregoric elixir may be put into the patient's drink twice a day. Fuller's Spaniſh infuſion is alſo a very proper medicine in this caſe, and may be taken in the quantity of a tea cupful three or four times a-day *.

When a cough is occaſioned by acrid humours tickling the throat and fauces, the patient ſhould keep ſome ſoft pectoral lozenges almoſt conſtantly in his mouth, as the Pontefract liquorice cakes, barley water, the common balſamic lozenges, Spaniſh juice, &c. Theſe blunt the acrimony of the humours, and by taking off their ſtimulating quality, help to appeaſe the cough †.

In obſtinate coughs proceeding from a flux of humours from the lungs, it will often be neceſſary, beſides expectorating medicines, to have recourſe to iſſues, ſetons, or ſome other drain. In this caſe, I have often obſerved the moſt happy effects from a Burgundy pitch plaſter applied between the ſhoulders. I have ordered this ſimple remedy in the moſt obſtinate coughs, in a great number of caſes, and in many different conſtitutions, without ever knowing it fail to give relief,

* See Appendix, *Spaniſh Infuſion.*

† In a former edition of this book, I recommended for an obſtinate tickling cough, an oily emulſion, made with the paregoric elixir of the Edinburgh Diſpenſary, inſtead of the common alkaline ſpirit. I have ſince been told by ſeveral practitioners, that they found it to be an excellent medicine in this diſorder, and every way deſerving of the character that I had given of it. Where this elixir is not kept, its place may be ſupplied by adding to the common oily emulſion, an adequate proportion of the *Thebaic tincture*, or liquid laudanum.

unleſs where there were evident ſigns of an ulcer in the lungs.

About the bulk of a nutmeg of Burgundy pitch may be ſpread thin upon a piece of ſoft leather, about the ſize of the hand, and laid between the ſhoulder-blades. It may be taken off and wiped every three or four days, and ought to be renewed once a fortnight or three weeks. This is indeed a cheap and ſimple medicine, and conſequently apt to be deſpiſed; but we will veture to affirm, that the whole *materia medica* does not afford an application more efficacious in almoſt every kind of cough. It has not indeed always an immediate effect; but, if kept on for ſome time, it will ſucceed where moſt other medicines fail.

The only inconveniency attending this plaſter is the itching which it occaſions; but ſurely this may be diſpenſed with, conſidering the advantage which the patient may expect to reap from the application; beſides, when the itching becomes very uneaſy, the plaſter may be taken off, and the part rubbed with a dry cloth, or waſhed with a little warm milk and water. Some caution indeed is neceſſary in diſcontinuing the uſe of ſuch a plaſter; this, however, may be ſafely done by making it ſmaller by degrees, and at length quitting it altogether in a warm ſeaſon ‡.

But coughs proceed from many other cauſes beſides defluxions upon the lungs. In theſe caſes the cure is not to be attempted by pectoral medicines. Thus, in a cough proceeding from a foulneſs and debility of the ſtomach, ſyrups, oils, mucilages, and all kinds of balſamic medicines do hurt. The *ſtomach cough* may be known from one that is owing to fault in the lungs by this, that in the latter the patient coughs whenever he inſpires, or draws in his breath fully; but in the former that does not happen.

‡ Some complain that the pitch plaster adheres too fast, while others find difficulty in keeping it on. This proceeds from the different kinds of pitch made use of, and likewise from the manner of making it. I generally find it answer best when mixed with a little bees' wax, and spread as cool as possible. The clear, hard, transparent pitch answers the purpose best.

The cure of this cough depends chiefly upon cleanſing and ſtrengthening the ſtomach; for which purpoſe gentle vomits and bitter purgatives are moſt proper. Thus, after a vomit or two, the ſacred tincture, as it is called, may be taken for a conſiderable time in the doſe of one or two table-ſpoonfuls twice a day, or as often as it is found neceſſary, to keep the body gently open. People may make this tincture themſelves, by infuſing one ounce of *hiera picra* ‡ in an Engliſh pint of white wine, letting it ſtand a few days, and then ſtraining it off.

In coughs which proceed from a debility of the ſtomach, the Peruvian bark is likewiſe of conſiderable ſervice. It may either be chewed, taken in powder, or made into a tincture along with other ſtomachic bitters.

A *nervous cough* can only be removed by change of air, and proper exerciſe; to which may be added the uſe of gentle opiates. Inſtead of the ſaponaceous pill, the paregoric elixir, &c. which are only opium diſguiſed, ten, fifteen, twenty, or twenty-five drops of liquid laudanum, more or leſs, as circumſtances require, may be taken at bed-time, or when the cough is moſt troubleſome. Immerſing the feet and hands in warm water will often appeaſe the violence of a nervous cough.

When a cough is only the ſymptom of ſome other malady, it is in vain to attempt to remove it without firſt curing the diſeaſe from which it proceeds. Thus, when a cough is occaſioned by *teething*, keeping the body open, ſcarifying the gums, or whatever facilitates the cutting of the teeth, likewiſe appeaſes the cough. In like manner, when *worms* occaſion a cough, ſuch medicines as remove theſe vermin will generally cure the cough; as bitter purgatives, oily clyſters, and ſuch like.

Women, during the laſt months of pregnancy, are often greatly afflicted with a cough, which is generally relieved by bleeding, and keeping the body gently

‡ See Appendix, *Hiera picra*.

open. They ought to avoid all flatulent food, and to wear a looſe eaſy dreſs.

A cough is not only a ſymptom, but is often likewiſe the forerunner of diſeaſe. Thus the gout is frequently uſhered in by a very troubleſome cough, which affects the patient for ſome days before the coming on of the fit. This cough is generally removed by a paroxyſm of the gout, which ſhould therefore be promoted, by keeping the extremities warm, drinking warm liquors, and bathing the feet and legs frequently in lukewarm water.

OF THE HOOPING-COUGH, OR CHIN-COUGH.

This cough ſeldom affects adults, but proves often fatal to children. Such children as live upon thin watery diet, who breathe unwholeſome air, and have too little exerciſe, are moſt liable to this diſeaſe, and generally ſuffer moſt from it.

The chin-cough is ſo well known, even to nurſes that a deſcription of it is unneceſſary. Whatever hurts the digeſtion, obſtructs the perſpiration, or relaxes the ſolids, diſpoſes to this diſeaſe; conſequently its cure muſt depend upon cleanſing and ſtrengthening the ſtomach, bracing the ſolids, and at the ſame time promoting perſpiration and the different ſecretions.

The diet muſt be light, and of eaſy digeſtion; for children, good bread made into pap or pudding, chicken broth, with other light, ſpoon meats, are proper; but thoſe who are farther advanced may be allowed ſago-gruel, and if the fever be not high, a little boiled chicken, or other white meats. The drink may be hyſſop, or penny-royal tea, ſweetened with honey or ſugar-candy, ſmall wine-whey; or if the patient be weak, he may ſometimes be allowed a little negus.

One of the moſt effectual remedies in the chin-cough is change of air. This often removes the malady, even when the change ſeems to be from a purer to a leſs wholeſome air. This may in ſome meaſure depend on the patient's being removed from the place

where the infection prevails. Moſt of the diſeaſes of children are infectious; nor is it all uncommon to find the chin cough prevailing in one town or village, when another at a very ſmall diſtance is quite free from it. But whatever be the cauſe, we are ſure of the fact. No time ought therefore to be loſt in removing the patient at ſome diſtance from the place where he caught the diſeaſe, and if poſſible into a more pure and warm air †.

When the diſeaſe proves violent, and the patient is in danger of being ſuffocated by the cough, he ought to be bled, eſpecially if there be a fever with a hard full pulſe. But as the chief intention of bleeding is to prevent an inflammation of the lungs, and to render it more ſafe to give vomits, it will ſeldom be neceſſary to repeat the operation; yet if there are ſymptoms of an inflammation of the lungs, a ſecond, or even a third bleeding may be requiſite.

It is generally reckoned a favourable ſymptom when a fit of coughing makes the patient vomit. This cleanſes the ſtomach and greatly relieves the cough. It will therefore be proper to promote this diſcharge either by ſmall doſes of ipecacuanha, or the vomiting julep recommended in the Appendix ‡.

It is very difficult to make children drink after a vomit. I have often ſeen them happily deceived, by infuſing a ſcruple or half a dram of the powder of ipecacuanha in a tea pot, with half an Engliſh pint of boiling water. If this be diſguiſed with a few drops of milk and a little ſugar, they will imagine it tea, and drink it very greedily. A ſmall tea cupful of this may be given every quarter of an hour, or rather every ten minutes, till it operates. When the child begins to puke, there

† Some think the air ought not to be changed till the disease is on the decline, but there seems to be no sufficient reason for this opinion, as patients have been known to reap benefit from a change of air at all periods of the disease. It is not sufficient to take the patient out daily in a carriage. This seldom answers any good purpose; but often does hurt, by giving him cold.

‡ See Appendix, *Vomiting Julep.*

will be no occaſion for drinking any more, as the water already on the ſtomach will be ſufficient.

Vomits not only cleanſe the ſtomach, which in this diſeaſe is generally loaded with viſcid phlegm, but they likewiſe promote the perſpiration and other ſecretions, and ought therefore to be repeated according to the obſtinacy of the diſeaſe. They ſhould not however be ſtrong; gentle vomits frequently repeated are both leſs dangerous and more beneficial than ſtrong ones.

The body ought to be kept gently open. The beſt medicine for this purpoſe are rhubarb and its preparations, as the ſyrup, tincture, &c. Of theſe a tea ſpoonful or two may be given to an infant twice or thrice a-day, as there is occaſion. To ſuch as are farther advanced, the doſe muſt be proportionally increaſed, and repeated till it has the deſired effect. Thoſe who cannot be brought to take the bitter tincture, may have an infuſion of ſenna and prunes, ſweetened with manna, coarſe ſugar, or honey; or a few grains of rhubarb mixed with a tea ſpoonful or two of ſyrup or currant jelly, ſo as to diſguiſe the taſte. Moſt children are fond of ſyrups and jellies, and ſeldom refuſe even a diſagreeable medicine when mixed with them.

Many people believe that oily, pectoral, and balſamic medicines poſſeſs wonderful virtues for the cure of the chin cough, and accordingly exhibit them plentifully to patients of every age and conſtitution, without conſidering that every thing of this nature muſt load the ſtomach, hurt the digeſtion, and of courſe aggravate the diſorder ‡.

The millepedes, or woodlice, are greatly recommended for the cure of a chin cough. Thoſe who chuſe to make uſe of theſe inſects, may infuſe two ounces of them bruiſed in an Engliſh pint of ſmall

‡ Dr. Duplanil says he has seen many good effects from the kermes mineral in this complaint, the cough being frequently alleviated even by the first dose. The dose for a child of one year old, is a quarter of a grain dissolved in a cup of any liquid, repeated two or three times a-day. For a child of two years the dose is half a grain; and the quantity must be thus increased in proportion to the age of the patient.

white wine for one night; afterwards the liquor may be ſtrained through a cloth, and a table ſpoonful of it given to the patient three or four times a-day.

Opiates are ſometimes neceſſary to allay the violence of the cough. For this purpoſe, a little of the ſyrup of poppies, or five, ſix, or ſeven drops of laudanum, according to the age of the patient, may be taken in a cup of hyſſop or penny-royal tea, and repeated occaſionally*.

The garlic ointment is a well known remedy in North Britain for the chin cough. It is made by beating in a mortar garlic, with an equal quantity of hog's lard. With this the ſoles of the feet may be rubbed twice or thrice a-day; but the beſt method is to ſpread it upon a rag, and apply it in the form of a plaſter. It ſhould be renewed every night and morning at leaſt, as the garlic ſoon loſes its virtue. This is an exceeding good medicine both in the chin cough, and in moſt other coughs of an obſtinate nature. It ought not, however, to be uſe when the patient is very hot, or feveriſh, leſt it ſhould increaſe theſe ſymptoms.

The feet ſhould be bathed once every two or three days in lukewarm water, and a Burgundy pitch plaſter kept conſtantly between the ſhoulders. But when the diſeaſe proves very violent, it will be neceſſary, inſtead of it, to apply a bliſtering plaſter, and to keep the part open for ſome time with iſſue ointment.

When the diſeaſe is prolonged, and the patient is free from a fever, the Peruvian bark, and other bitters, are the moſt proper medicines. The bark may either be taken in ſubſtance, or in a decoction or infuſion, as is moſt agreeable. For a child, ten, fifteen, twenty grains, according to the age of the patient, may be given three or four times a-day. For an adult, half a drachm or two ſcruples will be proper. Some give the

* Some recommend the extract of hemlock as an extraordinary remedy in the hooping cough; but ſo far as I have been able to obſerve, it is no way ſuperior to opium, which, when properly adminiſtered, will often relieve ſome of the moſt troubleſome ſymptoms of this diſorder.

extract of the bark with cantharides; but to manage this requires a conſiderable attention. It is more ſafe to give a few grains of caſtor along with the bark. A child of ſix or ſeven years of age may take ſeven or eight grains of caſtor, with fifteen grains of powdered bark, for a doſe. This may be made into a mixture, with two or three ounces of any ſimple diſtilled water and a little ſyrup, and taken three or four times a-day.

CHAP. XXX.

INFLAMATION OF THE STOMACH, AND OTHER VISCERA.

ALL inflammations of the bowels are dangerous, and require the moſt ſpeedy aſſiſtance, as they frequently end in a ſuppuration, and ſometimes in a mortification, which is certain death.

CAUSES.—An inflammation of the ſtomach may proceed from any of the cauſes which produce an inflammatory fever; as cold liquor drank while the body is warm, obſtructed perſpiration, or the ſudden ſtriking in of any eruption. It may likewiſe proceed from the acrimony of the bile, or from acrid and ſtimulating ſubſtances taken into the ſtomach; as ſtrong vomits or purges, corroſive poiſons, and ſuch like. When the gout has been repelled from the extremities, either by cold or improper applications, it often occaſions an inflammation of the ſtomach. Hard or indigeſtible ſubſtances taken into the ſtomach, as bones, the ſtones of fruit, &c. may likewiſe have that effect.

SYMPTOMS——It is attended with a fixed pain and burning heat in the ſtomach: great reſtleſſneſs and anxiety; a ſmall, quick, and hard pulſe; vomiting, or at leaſt a nauſea and ſickneſs; exceſſive thirſt; coldneſs of the extemities, difficulty of breathing; cold clammy ſweats; and ſometimes convulſions and fainting fits. The ſtomach is ſwelled, and often feels hard to the touch. One of the moſt certain ſigns of this diſeaſe is the ſenſe

of pain which the patient feels upon taking any kind of food or drink, especially if it be either too hot or too cold.

When the patient vomits every thing he eats or drinks, is extremely restless, has a hiccup, with an intermitting pulse, and frequent fainting fits, the danger is very great.

REGIMEN.——All acrimonious, heating, and irritating food and drink are carefully to be avoided. The weakness of the patient may deceive the by-standers, and induce them to give him wines, spirits, or other cordials; but these never fail to increase the disease, and often occasion sudden death. The inclination to vomit may likewise impose on the attendants, and make them think a vomit necessary; but that too is almost certain death.

The food must be light, thin, cool, and easy of digestion. It must be given in small quantities, and should neither be quite cold nor too hot. Thin gruel made of barley or oatmeal, light toasted bread dissolved in boiling water, or very weak chicken broth, are the most proper. The drink should be clear whey, barley-water, water in which toasted bread has been boiled, or decoctions of emollient vegetables, as liquorice and marshmallow roots, sarsaparilla, &c.

MEDICINE.——Bleeding in this disease is absolutely necessary, and is almost the only thing that can be depended on. When the disease proves obstinate, it will often be proper to repeat this operation several times nor must the low state of the pulse deter us from doing so. The pulse indeed generally rises upon bleeding, and as long as that is the case the operation is safe.

Frequent fomentations with lukewarm water, or a decoction of emollient vegetables, are likewise beneficial. Flannel cloths dipped in these must be applied to the region of the stomach, and removed as they grow cool. They must neither be applied too warm, nor be suffered to continue till they become quite cold, as either of these extremes would aggravate the disease.

The feet and legs ought likewise to be frequently

bathed in lukewarm water, and warm bricks or poultices may be applied to the ſoles of the feet. The warm bath, if it can be conveniently uſed, will be of great ſervice.

In this, and all other inflammations of the bowels, an epiſpaſtic, or bliſtering plaſter applied over the part affected, is one of the beſt remedies I know. I have often uſed it, and do not recollect one inſtance wherein it did not give relief to the patient.

The only internal medicines which we ſhall venture to recommend in this diſeaſe, are mild clyſters. Theſe may be made of warm water, or thin water gruel; and if the patient be coſtive, a little ſweet oil, honey, or manna may be added. Clyſters anſwer the purpoſe of internal fomentation, while they keep the body open, and at the ſame time nouriſh the patient, who is often in this diſeaſe unable to retain any food upon his ſtomach. For theſe reaſons they muſt not be neglected, as the patient's life may depend on them.

INFLAMMATION OF THE INTESTINES.

This is one of the moſt painful and dangerous diſeaſes to which mankind are liable; it generally proceeds from the ſame cauſe as the inflammation of the ſtomach; to which may be added coſtiveneſs, worms, eating unripe fruits, or great quantities of nuts, drinking hard, windy, malt liquors, as ſtale bottled beer or ale, ſour wine, cyder, &c. It may likewiſe be occaſioned by a rupture, by ſchirrous tumours of the inteſtines, or by their oppoſite ſides growing together.

The inflammation of the inteſtines is denominated Iliac paſſion, Enteritis, &c. according to the name of the parts affected. The treatment, however, is nearly the ſame, whatever part of the inteſtinal canal be the ſeat of the diſeaſe; we ſhall therefore omit theſe diſtinctions, leſt they ſhould perplex the reader.

The ſymptoms here are nearly the ſame as in the foregoing diſeaſe; only the pain, if poſſible, is more acute, and is ſituated lower. The vomiting is likewiſe

more violent, and ſometimes even the excrements, together with the clyſters, are diſcharged by the mouth. The patient is continually belching up wind, and has an obſtruction of his urine.

While the pain ſhifts, and the vomiting only returns at certain intervals, and while the clyſters paſs downwards, there is ground to hope; but when the clyſters and fæces are vomited, and the patient is exceeding weak, with a low fluttering pulſe, a pale countenance, and a diſagreeable or ſtinking breath, there is great reaſon to fear that the conſequences will prove fatal. Clammy ſweats, black fœtid ſtools, with a ſmall intermitting pulſe, and a total ceſſation of pain, are the ſigns of a mortification already begun, and of approaching death.

REGIMEN.——The regimen in this diſeaſe is in general the ſame as in an inflammation of the ſtomach. The patient muſt be kept quiet, avoiding cold, and all violent paſſions of the mind. His food ought to be very light, and given in ſmall quantities; his drink weak and diluting; as clear whey, barley water, and ſuch like.

MEDICINE.—Bleeding in this, as well as in the inflammation of the ſtomach, is of the greateſt importance. It ſhould be performed as ſoon as the ſymptoms appear, and muſt be repeated according to the ſtrength of the patient, and the violence of the diſeaſe.

A bliſtering plaſter is here likewiſe to be applied immediately over the part where the moſt violent pain is. This not only relieves the pain of the bowels, but even clyſters, and purgative medicines, which before had no effect, will operate when the bliſters begin to riſe.

Fomentations and laxative clyſters are by no means to be omitted. The patient's feet and legs ſhould frequently be bathed in warm water, and cloths dipped in it applied to his belly. Bladders filled with warm water may likewiſe be applied to the region of the navel, and warm bricks, or bottles filled with warm water, to the ſoles of the feet. The clyſters may be made of barley water, or thin gruel with ſalt, and ſoftened with

ſweet oil or freſh butter. Theſe may be adminiſtered every two or three hours, or oftener, if the patient continues coſtive.

If the diſeaſe does not yield to clyſters and fomentations, recourſe muſt be had to pretty ſtrong purgatives; but as theſe, by irritating the bowels, often increaſe their contraction, and by that means fruſtrate their own intention, it will be neceſſary to join them with opiates, which, by allaying the pain, and relaxing the ſpaſmodic contractions of the guts, greatly aſſiſt the operation of purgatives in this caſe.

What anſwers the purpoſe of opening the body very well, is a ſolution of the bitter purging ſalts. Two ounces of theſe may be diſſolved in an Engliſh pint of warm water, or thin gruel, and a tea-cupful of it taken every half hour till it operates. At the ſame time fifteen, twenty, or twenty-five drops of laudanum may be given in a glaſs of peppermint or ſimple cinnamon-water, to appeaſe the irritation, and prevent the vomiting, &c.

Acids have often a very happy effect in ſtaying the vomiting, and appeaſing the other violent ſymptoms of this diſeaſe. It will therefore be of uſe to ſharpen the patient's drink with cream of tartar, juice of lemon; or when theſe cannot be obtained with vinegar.

But it often happens that no liquid whatever will ſtay on the ſtomach In this caſe the patient muſt take purging pills. I have generally found the following anſwer very well: Take jalap in powder, and vitriolated tartar, of each half a drachm, opium one grain, Caſtille ſoap as much as will make the maſs fit for pills. Theſe muſt be taken at one doſe, and if they do not operate in a few hours, the doſe may be repeated.

If a ſtool cannot be procured by any of the above means, it will be neceſſary to immerſe the patient in warm water up to the breaſt. I have often ſeen this ſucceed when other means have been tried in vain. The patient muſt continue in the warm water as long as he can eaſily bear it without fainting, and if one immerſion has not the deſired effect, it may be repeated as ſoon as

the patient's ſtrength and ſpirits are recruited. It is more ſafe for him to go frequently into the bath, than to continue long at a time; and it is often neceſſary to repeat it ſeveral times before it has the deſired effect.

It has ſometimes happened, after all other means of procuring a ſtool has been tried to no purpoſe, that this was brought about by immerſing the patient's lower extremities in cold water, or making him walk upon a wet pavement, and daſhing his legs and thighs with cold water. This method, when others fail, at leaſt merits a trial. It is indeed attended with ſome danger; but a doubtful remedy is better than none.

In deſperate caſes it is common to give quick-ſilver. This may be given to the quantity of ſeveral ounces, or even a pound, but ſhould not exceed that†. When there is reaſon to expect a mortification of the guts, this medicine ought not to be tried. In this caſe it cannot cure the patient, and will only haſten his death. But when the obſtruction is occaſioned by any cauſe that can be removed by force, quickſilver is not only a proper medicine, but the beſt that can be adminiſtered, as it is the fitteſt body we know for making its way through the inteſtinal canal.

If the diſeaſe proceeds from a rupture, the patient muſt be laid with his head very low and the inteſtines returned by gentle preſſure with the hand. If this, with fomentations and clyſters, ſhould not ſucceed, recourſe muſt be had to a ſurgical operation, which may give the patient relief.

Such as would avoid this excruciating and dangerous diſeaſe, muſt take care never to be too long without a ſtool. Some who have died of it have had ſeveral pounds of hard dry *fæces* taken out of their guts. They ſhould likewiſe beware of eating too freely of ſour or unripe fruits, or drinking ſtale windy liquors, &c. I have

† When quicksilver is given in too large quantities, it defeats its own intention, as it pulls down the bottom of the stomach, which prevents it getting over the pylorus. In this case the patient should be hung up by the heels, in order that the quicksilver may be discharged by his mouth.

known it brought on by living too much on baked fruits, which are ſeldom good. It likewiſe proceeeds frequently from cold caught by wet clothes, &c. but eſpecially from wet feet.

OF THE COLIC.

The colic has a great reſemblance to the two preceding diſeaſes, both in its ſymptoms and method of cure. It is generally attended with coſtiveneſs and acute pain of the bowels; and requires diluting diet, evacuations, fomentations, &c.

Colics are variouſly denominated according to their cauſes, as the *flatulent*, the *bilious*, the *hyſteric*, the *nervous*, &c. As each of theſe requires a particular method of treatment, we ſhall point out their moſt general ſymptoms, and the means to be uſed for their relief.

The *flatulent*, or wind-colic, is generally occaſioned by an indiſcrete uſe of unripe fruits, meats of hard digeſtion, windy vegetables, fermenting liquors, and ſuch like. It may likewiſe proceed from an obſtructed perſpiration, or catching cold. Delicate people, whoſe digeſtive powers are weak, are moſt liable to this kind of colic.

The flatulent colic may either affect the ſtomach or inteſtines. It is attended with a painful ſtretching of the affected part. The patient feels a rumbling in his guts and is generally relieved by a diſcharge of wind, either upwards or downwards. The pain is ſeldom confined in any particular part, as the vapour wanders from one diviſion of the bowels to another, till it finds a vent.

When the diſeaſe proceeds from windy liquor, green fruits, four herbs, or the like, the beſt medicine on the firſt appearance of the ſymptoms is a dram of brandy, gin, or any good ſpirits. The patient ſhould likewiſe ſit with his feet upon a warm hearth-ſtone, or apply warm bricks to them; and warm cloths may be applied to his ſtomach and bowels.

This is the only colic wherein ardent ſpirits, ſpice,

or any thing of a hot nature may be ventured upon. Nor indeed are they to be uſed here unleſs at the very beginning, before any ſymptoms of inflammation appear. We have reaſon to believe that the colic occaſioned by wind or flatulent food might always be cured by ſpirits and warm liquors, if they are taken immediately upon perceiving the firſt uneaſineſs; but when the pain has continued for a conſiderable time, and there is reaſon to fear an inflammation of the bowels has already been begun, all hot things are to be avoided as poiſon, and the patient is to be treated in the ſame manner as for the inflammation of the inteſtines.

Several kinds of food, as honey, eggs, &c. occaſion colics in ſome particular conſtitutions. I have generally found the beſt method of cure for theſe was to drink plentifully of ſmall diluting liquors, as water-gruel, ſmall poſſet, toaſt and water, &c.

Colics which proceed from exceſs and indigeſtion generally cure themſelves by occaſioning vomiting or purging. Theſe diſcharges are by no means to be ſtopped, but promoted by drinking plentifully of warm water or weak poſſet. When their violence is over the patient may take a doſe of rhubarb, or any other gentle purge, to carry off the dregs of his debauch.

Colics which are occcſioned by wet feet, or catching cold, may generally be removed at the beginning by bathing the feet and legs in warm water, and drinking ſuch warm diluting liquors as will promote the perſpiration, as weak wine whey, or water gruel with a ſmall quantity of ſpirits in it.

Thoſe flatulent colics which prevail ſo much among country people, might generally be prevented were they careful to change their clothes when they get wet. They ought likewiſe to take a dram, or to drink ſome warm liquor after eating any kind of green traſh. We do not mean to recommend the practice of dram-drinking, but in this caſe ardent ſpirits prove a real medicine, and indeed the beſt that can be adminiſtered. A glaſs of good peppermint water will have nearly

the ſame effect as a glaſs of brandy, and in ſome caſes is rather to be prefered.

The *bilious* colic is attended with very acute pains about the region of the navel. The patient complains of great thirſt, and is generally coſtive. He vomits a hot, bitter, yellow-coloured bile, which being diſcharged ſeems to afford ſome relief, but is quickly followed by the ſame violent pain as before. As the diſtemper advances, the propenſity to vomit ſometimes increaſes ſo as to become almoſt continual, and the proper motion of the inteſtines is ſo far perverted, that there are all the ſymptoms of an impending iliac paſſion.

If the patient be young and ſtrong, and the pulſe full and frequent, it will be proper to bleed, after which clyſters may be adminiſtered. Clear whey or gruel, ſharpened with the juice of lemon, or cream of tartar, muſt be drank freely; ſmall chicken-broth, with a little manna diſſolved in it or a ſlight decoction of tamarinds, are likewiſe very proper, or any other thin, acid, opening liquor.

Beſides bleeding and plentiful dilution, it will be neceſſary to foment the belly with cloths dipped in warm water, and if this ſhould not ſucceed, the patient muſt be immerſed up to the breaſt in warm water.

In the bilious colic the vomiting is often very difficult to reſtrain. When this happens, the patient may drink a decoction of toaſted beead, or an infuſion of garden-mint in boiling water. Should theſe not have the deſired effect, the ſame draught, with a few drops of laudanum in it, may be given, and repeated according to the urgency of the ſymptoms. A ſmall quantity of Venice treacle may be ſpread in form of a cataplaſm, and applied to the pit of the ſtomach. Clyſters, with a proper quantity of Venice treacle or liquid laudanum in them may likewiſe be frequently adminiſtered.

The *hyſteric* colic bears a great reſemblance to the bilious. It is attended with acute pains about the region of the ſtomach, vomiting, &c. What the patient vomits in this caſe is commonly of a greeniſh colour. There is a great ſinking of the ſpirits, with dejection of mind and

difficulty of breathing, which are the characteriſtic ſymptoms of this diſorder. Sometimes it is accompanied with the jaundice, but this generally goes off of its own accord in a few days.

In this colic, all evacuations, as bleeding, purging, vomiting, &c. do hurt. Every thing that weakens the patient, or ſinks the ſpirits, is to be avoided. If, however, the vomiting ſhould prove violent, lukewarm water, or ſmall poſſet, may be drank to cleanſe the ſtomach. Afterwards the patient may take fifteen, twenty, or twenty-five drops of liquid laudanum in a glaſs of cinnamon water; this may be repeated every ten or twelve hours till the ſymptoms abate.

The patient may likewiſe take four or five of the fœtid pills every ſix hours, and drink a cup of pennyroyal tea after them. If aſafœtida ſhould prove diſagreeable, which is ſometimes the caſe, a tea-ſpoonful of the tincture of caſtor in a cup of pennyroyal tea, or thirty or forty drops of the balſam of Peru dropped upon a bit of loaf-ſugar, may be taken in its ſtead. The anti-hyſteric plaſter may alſo be uſed, which has often a good effect*.

The *nervous* colic prevails among miners, ſmelters of lead, plumbers, the manufacturers of white lead, &c. It is very common in the cyder counties of England, and is ſuppoſed to be occaſioned by the leaden veſſels uſed in preparing that liquor. It is likewiſe a frequent diſeaſe in the Weſt Indies, where it is termed the dry belly-ache.

No diſeaſe of the bowels is attended with more excruciating pain than this. Nor is it ſoon at an end. I have known it continue eight or ten days with very little intermiſſion, the body all the while continuing bound in ſpite of medicine, yet at length yield, and the patient recover †. It generally, however, leaves the patient weak, and often ends in a palſy.

* See Appendix, *Anti-hyſteric plaſter.*

† As the ſmoke of tobacco thrown into the bowels will often procure a ſtool when all other means have failed, an apparatus for this purpoſe ought to be kept by every ſurgeon. It may be purchaſed at

The general treatment of this diſeaſe is ſo nearly the ſame with that of the iliac paſſion, or inflammation of the guts, that we ſhall not inſiſt upon it. The body is to be opened by mild purgatives given in ſmall doſes, and frequently repeated, and their operation muſt be aſſiſted by ſoft oily clyſters, fomentations, &c. The caſtor oil is reckoned peculiarly proper in this diſeaſe. It may both be mixed with the clyſters and given by the mouth; a table ſpoonful to two or three is a ſufficient doſe.

The Barbadoes tar is ſaid to be an efficacious medicine in this complaint. It may be taken to the quantity of two drachms three times a-day, or oftener if the ſtomach will bear it. This tar, mixed with an equal quantity of ſtrong rum, is likewiſe proper for rubbing the ſpine, in caſe any tingling, or other ſymptoms of the palſy, are felt. When the tar cannot be obtained, the back may be rubbed with ſtrong ſpirits, or a little oil of nutmegs, or of roſemary.

If the patient remain weak and languid after this diſeaſe, he muſt take exerciſe on horſeback, and uſe an infuſion of the Peruvian bark in wine. When the diſeaſe ends in a palſy, the Bath waters are found to be extremely proper.

To avoid this kind of colic people muſt ſhun all ſour fruits, acid and auſtere liquors, &c. Thoſe who work in lead ought never to go to their buſineſs faſting, and their food ſhould be oily or fat. They may take a glaſs of ſallad oil, with a little brandy or rum, every morning, but ſhould never take ſpirits alone. Liquid aliment is beſt for them, as fat broths, &c. but low living is bad. They ſhould frequently go a little out of the tainted air, and ſhould never ſuffer themſelves to be coſtive. In the Weſt Indies, and on the coaſt of Guinea, it has been found of great uſe, for preventing this colic, to wear a piece of flannel round the waiſt, and to drink an infuſion of ginger by way of tea.

a ſmall expence, and will be of ſervice in ſeveral other caſes, as the recovery of drowned perſons, &c.

Sundry other kinds of this diſeaſe might be mentioned, but too many diſtinctions would tend only to perplex the reader. Thoſe already mentioned are the moſt material, and ſhould indeed be attended to, as their treatment is very different. But even perſons who are not in a condition to diſtinguiſh very accurately in theſe matters, may nevertheleſs be of great ſervice to patients in colics of every kind, by only obſerving the following general rules, viz. to bathe the feet and legs in warm water, to apply bladders filled with warm water, or cloths dipped in it, to the ſtomach and bowels; to make the patient drink freely of diluting mucilaginous liquors; and to give him an emollient clyſter every two or three hours. Should theſe not ſucceed the patient ought to be immerſed in warm water.

INFLAMMATION OF THE KIDNEYS.

CAUSES.——This diſeaſe may proceed from any of thoſe cauſes which produce an inflammatory fever. It may likewiſe be occaſioned by wounds or bruiſes of the kidneys, ſmall ſtones or gravel lodging within them, by ſtrong dieuretic medicines, as ſpirits of turpentine, tincture of cantharides, &c. Violent motion, as hard riding or walking, eſpecially in hot weather, or whatever drives the blood too forcibly into the kidneys may occaſion this malady. It may likewiſe proceed from lying too ſoft, too much on the back, involuntary contractions, or ſpaſms in the urinary veſſels, &c.

SYMPTOMS.——There is a ſharp pain about the region of the kidneys, with ſome degree of fever, and a ſtupor or dull pain in the thigh of the affected ſide. The urine is at firſt clear, and afterwards of a reddiſh colour; but in the worſt kind of the diſeaſe it generally continues pale, is paſſed with difficulty, and commonly in ſmall quantities at a time. The patient feels great uneaſineſs when he endeavours to walk or ſit upright. He lies with more eaſe on the affected ſide, and has generally a nauſea or vomiting, reſembling that which happens in the colic.

This diſeaſe, however, may be diſtinguiſhed from the

colic by the pain being ſeated farther back, and by the difficulty of paſſing urine, with which it is conſtantly attended.

REGIMEN.——Every thing of a heating or ſtimulating nature is to be avoided. The food muſt be thin and light; as panado, ſmall broths, with mild vegetables, and the like. Emollient and thin liquors muſt be plentifully drank; as clear whey, or balm-tea ſweetened with honey, decoctions of marſh-mallow roots, with barley and liquorice, &c. The patient, notwithſtanding the vomiting, muſt conſtantly keep ſipping ſmall quantities of theſe or other diluting liquors. Nothing ſo ſafely and certainly abates the inflammation, and expels the obſtructing cauſe, as copious dilution. The patient muſt be kept eaſy, quiet, and free from cold, as long as any ſymptoms of inflammation remain.

MEDICINE.——Bleeding is generally neceſſary, eſpecially at the beginning. Ten or twelve ounces may be let from the arm or foot with a lancet; and if the pain and inflammation continue, the operation may be repeated in twenty-four hours, eſpecially if the patient be of a full habit. Leeches may likewiſe be applied to the hæmorrhoidal veins, as a diſcharge from theſe will greatly relieve the patient.

Cloths dipped in warm water, or bladders filled with it, muſt be applied as near as poſſible to the part affected, and renewed as they grow cool. If the bladders be filled with a decoction of mallows and camomile flowers, to which a little ſaffron is added, and mixed with about a third part of new milk, it will be ſtill more beneficial.

Emollient clyſters ought frequently to be adminiſtered; and if theſe do not open the body, a little ſalt and honey or manna may be added to them.

The ſame courſe is to be followed where gravel or ſtone is lodged in the kidneys, but when the gravel or ſtone is ſeparated from the kidney, and lodges in the ureter †, it will be proper, beſides the fomentations,

† The ureters are two long and ſmall canals, one on each ſide, which carry the urine from the baſon of the kidneys to the bladder. They are ſometimes obſtructed by ſmall ſtones or gravel falling down from the kidneys, and lodging in them.

to rub the ſmall of the back with ſweet oil, and to give gentle diuretics; as juniper water ſweetened with the ſyrup of marſhmallows; a tea ſpoonful of the ſweet ſpirits of nitre, with a few drops of laudanum, may now and then be put in a cup of the patient's drink; he ought likewiſe to take exerciſe on horſeback, or in a carriage, if he be able to bear it.

When the diſeaſe is protracted beyond the ſeventh or eighth day, and the patient complains of a ſtupor and heavineſs of the part, has frequent return of chilneſs, ſhivering, &c. there is reaſon to ſuſpect that matter is forming in the kidney, and that an abſceſs will enſue.

When matter in the urine ſhews that an ulcer is already formed in the kidney, the patient muſt be careful to abſtain from all acid, ſour, and ſalted proviſions, and to live chiefly upon mild mucilaginous herbs and fruits, together with the broth of young animals, made with barley, and common pot herbs, &c. His drink may be whey, and butter milk that is not ſour. The latter is by ſome reckoned a ſpecific remedy in ulcers of the kidneys. To anſwer this character, however, it muſt be drank for a conſiderable time. Chalybeate waters have likewiſe been beneficial in this diſeaſe. This medicine is eaſily obtained, as it is found in every part of Great Britain; it muſt likewiſe be uſed for a conſiderable time, in order to produce any ſalutary effects.

Thoſe who are liable to frequent returns of inflammation, or obſtructions of the kidneys, muſt abſtain from wines, eſpecially ſuch as abound with tartar; and their food ought to be light and eaſy of digeſtion. They ſhould uſe moderate exerciſe, not lie too hot, nor too much on their back.

INFLAMMATION OF THE BLADDER.

The inflammation of the bladder proceeds in a great meaſure, from the ſame cauſes as that of the kidneys. It is known by an acute pain towards the bottom of the belly, and difficulty of paſſing urine, with ſome degree

of fever, a conſtant inclination to go to ſtool, and a perpetual deſire to make water.

This diſeaſe muſt be treated on the ſame principles as the one immediately preceding. The diet muſt be light and thin, and the drink of a cooling nature. Bleeding is very proper at the beginning, and in robuſt conſtitutions it will often be neceſſary to repeat it. The lower part of the belly ſhould be fomented with warm water, or a decoction of mild vegetables; and emollient clyſters ought frequently to be adminiſtered, &c.

The patient ſhould abſtain from every thing that is of a hot, acrid, and ſtimulating quality; and ſhould live entirely upon ſmall broths, gruels, or mild vegetables.

A ſtoppage of urine may proceed from other cauſes beſides an inflammation of the bladder; as a ſwelling of the hæmorrhoidal veins; hard *fæces* lodged in the *rectum*; a ſtone in the bladder; excreſcences in the urinary paſſages, a palſy of the bladder, hyſteric affections, &c. Each of theſe requires particular treatment, which does not fall under our preſent conſideration. We ſhall only obſerve, that in all of them mild and gentle applications are the ſafeſt, as ſtrong diuretic medicines, or things of an irritating nature, generally increaſe the danger. I have known ſome perſons kill themſelves by introducing probes in the urinary paſſages, to remove, as they thought, ſomewhat that obſtructed the diſcharge of urine, and others bring on a violent inflammation of the bladder, by uſing ſtrong diuretics, as oil of turpentine, &c. for that purpoſe.

INFLAMMATION OF THE LIVER.

The liver is leſs ſubject to inflammation than moſt of the other viſcera, as in it the circulation is ſlower; but when an inflammation does happen, it is with difficulty removed, and often ends in a ſuppuration or ſcirrhus.

CAUSES.——Beſides the common cauſes of inflammation, we may here reckon the following, viz. exceſſive fatneſs, a ſcirrhus of the liver itſelf, violent

ſhocks from ſtrong vomits when the liver was before unſound, an aduſt or atrabilious ſtate of the blood, any thing that ſuddenly cools the liver after it has been gently heated, ſtones obſtructing the courſe of the bile, drinking ſtrong wine and ſpirituous liquors, uſing hot ſpicy aliment, obſtinate hypochondriacal affections, &c.

SYMPTOMS.——This diſeaſe is known by a painful tenſion of the right ſide under the falſe ribs, attended with ſome degree of fever, a ſenſe of weight or fulneſs of the part, difficulty of breathing, loathing of food, great thirſt, with a pale or yellowiſh colour of the ſkin and eyes.

The *ſymptoms* here are various, according to the degree of inflammation, and likewiſe according to the particular part of the liver where the inflammation happens. Sometimes the pain is ſo inconſiderable, that an inflammation is not ſo much as ſuſpected; but when it happens in the upper or convex part of the liver, the pain is more acute, the pulſe quicker, and the patient is often troubled with a dry cough, a hiccup, and a pain extending to the ſhoulder, with difficulty of lying on the left ſide, &c.

This diſeaſe may be diſtinguiſhed from the pleuriſy, by the pain being leſs violent, ſeated under the falſe ribs, the pulſe not ſo hard, and by the difficulty of lying on the left ſide. It may be diſtinguiſhed from the hyſteric and hypochondriacal diſorders by the degree of fever with which it is always attended.

This diſeaſe, if properly treated, is ſeldom mortal. A conſtant hiccuping, violent fever, and exceſſive thirſt, are bad ſymptoms. If it ends in a ſuppuration, and the matter cannot be diſcharged outwardly, the danger is great. When the ſcirrhus of the liver enſues, the patient, if he obſerves a proper regimen, may nevertheleſs live a number of years tolerably eaſy; but if he indulge in ſtrong animal food and ſtrong liquors, or take medicines of an acrid or irritating nature, the ſcirrhus will be converted into a cancer, which muſt infallibly prove fatal.

REGIMEN.——The ſame regimen is to be obſerv-

ed in this as in other inflammatory diſorders. All hot things are to be carefully avoided; and cool diluting liquors, as whey, barley-water, &c. drank freely. The food muſt be light and thin, and the body as well as the mind, kept eaſy and quiet.

MEDICINE.—Bleeding is proper at the beginning of this diſeaſe, and it will often be neceſſary, even though the pulſe ſhould not feel hard, to repeat it. All violent purgatives are to be avoided; the body, however, muſt be kept gently open. A decoction of tamarinds, with a little honey or manna, will anſwer this purpoſe very well. The ſide affected muſt be fomented in the manner directed in the foregoing diſeaſes. Mild laxative clyſters ſhould be frequently adminiſtered; and if the pain ſhould notwithſtanding continue violent, a bliſtering-plaſter may be applied over the part affected.

Medicines which promote the ſecretion of urine have a very good effect here. For this purpoſe, half a drachm of purified nitre, or a tea-ſpoonful of the ſweet ſpirits of nitre, may be taken in a cup of the patient's drink three or four times a-day.

When there is an inclination to ſweat, it ought to be promoted, but not by warm ſudorifics. The only thing to be uſed for that purpoſe is plenty of diluting liquor drank about the warmth of the human blood. Indeed the patient in this caſe, as well as in all other topical inflammations, ought to drink nothing that is colder than the blood.

If the ſtools ſhould be looſe, and even ſtreaked with blood, no means muſt be uſed to ſtop them, unleſs they be ſo frequent as to weaken the patient. Looſe ſtools often prove critical, and carry off the diſeaſe.

If an abſceſs or impoſthume is formed in the liver, all methods ſhould be tried to make it break and diſcharge itſelf outwardly, as fomentations, the application of poultices, ripening cataplaſms, &c. Sometimes indeed the matter of an abſceſs comes away in the urine, and ſometimes it is diſcharged by ſtool; but theſe are efforts of Nature which no means can promote. When the abſceſs burſts into the cavity of the *abdomen* at large,

death muſt enſue; nor will the event be more favourable when the abceſs is opened by an inciſion, unleſs in caſes where the liver adheres to the *peritonæum*, ſo as to form a bag for the matter, and prevent it from falling into the cavity of the *abdomen*; in which caſe opening the abſceſs by a ſufficiently large inciſion will probably ſave the patient's life *.

If the diſorder, in ſpite of all endeavours to the contrary, ſhould end in a ſcirrhus, the patient muſt be careful to regulate his diet, &c. in ſuch a manner as not to aggravate the diſeaſe. He muſt not indulge in fleſh, fiſh, ſtrong liquors, or any highly ſeaſoned or ſalted proviſions; but ſhould, for the moſt part, live on mild vegetables, as fruits and roots, taking gentle exerciſe, and drinking whey, barley-water, or butter-milk. If he takes any thing ſtronger, it ſhould be fine mild ale, which is leſs heating than wines or ſpirits.

We ſhall take no notice of inflammations of the other viſcera. They muſt in general be treated upon the ſame principles as thoſe already mentioned. The chief rule with reſpect to all of them is, to let blood, to avoid every thing that is ſtrong, or of a heating nature, to apply warm fomentations to the part affected, and to cauſe the patient to drink a ſufficient quantity of warm diluting liquors.

Warm fomentations frequently repeated are the beſt means of relief for the diſeaſes here treated of. Of theſe the *anodyne fomentation*, ſpecified in the Appendix, with the occaſional addition of a handful of camomile flowers, may be particularly recommended.

If the fomentations are not effectual, the warm-bath may be reſorted to with advantage, in which the patient ought to remain while his ſtrength will permit. For want of a proper bath, a caſk or tub may be uſed.

The coſtiveneſs accompanying inflammations of the ſtomach and bowels will be better removed by a perſeverance in mild and gentle medicines, than by the

* I know a gentleman who had ſeveral abſceſſes of the liver opened, and is now a ſtrong and healthy man, though above eighty years of age.

uſe of ſtrong purgatives; different medicines, however, ſhould be tried and perſiſted in, till the effect be produced, and even external applications may ſometimes be adminiſtered with effect when the beſt intermitting remedies have failed.

CHAP. XXXI.

OF THE CHOLERA MORBUS, AND OTHER EXCESSIVE DISCHARGES FROM THE STOMACH AND BOWELS.

THE cholera morbus is a violent purging and vomiting attended with gripes, ſickneſs, and a conſtant deſire to go to ſtool. It comes on ſuddenly, and is moſt common in autumn. There is hardly any diſeaſe that kills more quickly than this, when proper means are not uſed for removing it.

CAUSES.—It is occaſioned by a redundancy and putrid acrimony of the bile, cold, food that eaſily turns rancid or ſour on the ſtomach, as butter, bacon, ſweet meats, cucumbers, melons, cherries, and other cold fruits *. It is ſometimes the effect of ſtrong acrid purges or vomits, or of poiſonous ſubſtances taken into the ſtomach. It may likewiſe proceed from violent paſſions or affections of the mind, as fear, anger, &c.

SYMPTOMS.—It is generally preceded by a cardialgia, or heart-burn, ſour belching, and flatulencies, with pain of the ſtomach and inteſtines. To theſe ſucceed exceſſive vomiting, and purging of green, yellow, or blackiſh coloured bile, with a diſtenſion of the ſtomach, and violent griping pains. There is likewiſe a great thirſt, with a very quick, unequal pulſe, and often a fixed acute pain about the region of the navel. As the diſeaſe advances, the pulſe often ſinks ſo low as to become quite imperceptible, the extremities grow cold, or cramped, and are often covered with a clammy

* I have been twice brought to the gates of death by this disease, and both times it was occasioned by eating rancid bacon.

ſweat, the urine is obſtructed, and there is a palpitation of the heart. Violent hiccuping, fainting, and convulſions, are the ſigns of approaching death.

MEDICINE.——At the beginning of this diſeaſe, the efforts of Nature to expel the offending cauſe ſhould be aſſiſted, by promoting the purging and vomiting. For this purpoſe, the patient muſt drink freely of diluting liquors, as whey, butter milk, warm water, thin water gruel, ſmall poſſet, or, what is perhaps preferable to any of them, very weak chicken broth. This ſhould not only be drank plentifully to promote the vomiting, but a clyſter of it given every hour in order to promote the purging.

After theſe evacuations have been continued for ſome time, a decoction of toaſted oat bread may be drank to ſtop the vomiting; the bread ſhould be toaſted till it is of a brown colour, and afterwards boiled in ſpring water. If oat bread cannot be had, wheat bread, or oatmeal well toaſted may be uſed in its ſtead. If this does not put a ſtop to the vomiting, two table ſpoonfuls of the ſaline julep, with ten drops of laudanum, may be taken every hour till it ceaſes.

The vomiting and purging, however, ought never to be ſtopped too ſoon; as long as theſe diſcharges do not weaken the patient they are ſalutary, and may be allowed to go on, or rather ought to be promoted. But when the patient is weakened by the evacuations, which may be known from the ſinking of his pulſe, &c. recourſe muſt immediately be had to opiates, as recommended above; to which may be added ſtrong wines, with ſpirituous cinnamon waters, and other generous cordials. Weak negus, or ſtrong wine whey, will likewiſe be neceſſary to ſupport the patient's ſpirits, and promote the perſpiration. His legs ſhould be bathed in warm water, and afterwards rubbed with flannel cloths, or wrapped in warm blankets, and warm bricks applied to the ſoles of his feet. Flannels wrung out of warm ſpirituous fomentations ſhould likewiſe be applied to the regions of the ſtomach.

When the violence of the diſeaſe is over, to prevent

a relapſe, it will be neceſſary for ſome time to continue the uſe of ſome ſmall doſes of laudanum. Ten or twelve drops may be taken in a glaſs of wine, at leaſt twice a-day, for eight or ten days. The patient's food ought to be nouriſhing, but taken in ſmall quantities, and he ſhould uſe moderate exerciſe; as the ſtomach and inteſtines are generally much weakened, an infuſion of the bark, or other bitters, in ſmall wine, ſharpened with the elixir of vitriol, may be drank for ſome time.

Though phyſicians are ſeldom called in due time in this diſeaſe, they ought not to deſpair of relieving the patient even in the moſt deſperate circumſtances. Of this I lately ſaw a very ſtriking proof in an old man and his ſon, who had been both ſeized with it about the middle of the night. I did not ſee him till next morning, when they had much more the appearance of dead than of living men. No pulſe could be felt; the extremities were cold and rigid, the countenance was ghaſtly, and the ſtrength almoſt quite exhauſted. Yet from this deplorable condition they were both recovered by the uſe of opiates and cordial medicines.

OF A DIARRHŒA, OR LOOSENESS.

A looſeneſs, in may caſes, is not to be conſidered as a diſeaſe, but rather as a ſalutary evacuation. It ought therefore never to be ſtopped, unleſs when it continues too long, or evidently weakens the patient; as this, however, ſometimes happens, we ſhall point out the moſt common cauſes of a looſeneſs, with the proper method of treatment.

When a looſeneſs is occaſioned by catching cold, or an obſtructed perſpiration, the patient ought to keep warm, or drink freely of weak diluting liquors, to bathe his feet and legs frequently in lukewarm water, to wear flannel next his ſkin, and to take every other method to reſtore the perſpiration.

In a looſeneſs which proceeds from exceſs or repletion, a vomit is the proper medicine. Vomits not only cleanſe the ſtomach, but promote all the ſecretions,

which renders them of great importance in carrying off a debauch. Half a drachm of ipecacuanha in powder will anſwer this purpoſe very well; a day or two after the vomit, the ſame quantity of rhubarb may be taken, and repeated two or three times if the looſeneſs continues. The patient ought to live upon light vegetable food of eaſy digeſtion, and to drink whey, thin gruel, or barley water.

A looſeneſs occaſioned by the obſtruction of any cuſtomary evacuation, generally requires bleeding. If that does not ſucceed, other evacuations may be ſubſtituted in the room of thoſe which are obſtructed; at the ſame time every method is to be taken to reſtore the uſual diſcharges, as not only the cure of the diſeaſe, but the patient's life, may depend on this.

A periodical looſeneſs ought never to be ſtopped. It is always an effort of Nature to carry off ſome offending matter, which if retained in the body might have fatal effects. Children are very liable to this kind of looſeneſs, eſpecially while teething; it is, however, ſo far from being hurtful to them, that ſuch children generally get their teeth with leaſt trouble. If theſe looſe ſtools ſhould at any time prove ſour or griping, a tea ſpoonful of magneſia alba, with four or five grains of rhubarb, may be given to the child with a little panado, or any other food. This, if repeated three or four times, will generally correct the acidity, and carry off the griping ſtools.

A diarrhœa or looſeneſs, which proceeds from violent paſſions or affections of the mind, muſt be treated with the greateſt caution. Vomits in this caſe are highly improper; nor are purges ſafe unleſs they are very mild, and given in ſmall quantities. Opiates, and other antiſpaſmodic medicines are moſt proper. Ten or twelve drops of liquid laudanum may be taken in a cup of valerian or pennyroyal tea every eight or ten hours, till the ſymptoms abate. Eaſe, cheerfulneſs, and tranquillity of mind, are here of the greateſt importance.

When a looſeneſs proceeds from acrid or poiſonous ſubſtances taken into the ſtomach, the patient muſt

drink large quantities of diluting liquors, with oil or fat broths, to promote vomiting and purging; afterwards, if there be reaſon to ſuſpect that the bowels be inflamed, bleeding will be neceſſary; ſmall doſes of laudanum may likewiſe be taken to remove their irritation.

When the gout, repelled from the extremities, occaſions a looſeneſs, it ought to be repelled by gentle doſes of rhubarb, or other mild purgatives; the gouty matter is likewiſe to be ſolicited towards the extremities by warm fomentations, cataplaſms, &c.; the perſpiration ought at the ſame time to be promoted by warm diluting liquors, as wine whey, with ſpirits of hartſhorn, or a few drops of liquid laudanum, in it.

When a looſeneſs proceeds from worms, which may be known by the ſlimineſs of the ſtools, mixed with pieces of decayed worms, &c. medicines may be given to kill and carry off theſe vermin, as the powder of tin, with purges of rhubarb and calomel; afterwards lime-water, either alone, or with a ſmall quantity of rhubarb infuſed, will be proper to ſtrengthen the bowels, and prevent the new generation of worms.

A looſeneſs is often occaſioned by drinking bad water; when this is the caſe, the diſeaſe generally proves epidemical. When there is reaſon to believe that this or any other diſeaſe proceeds from the uſe of unwholeſome water, it ought immediately to be changed, or, if that cannot be done, it may be corrected, by mixing with it quicklime, chalk, or the like.

In people whoſe ſtomachs are weak, violent exerciſe immediately after eating will cauſe a looſeneſs. Though the cure of this is obvious, yet it will be proper, beſides avoiding violent exerciſe, to uſe ſuch medicines as tend to brace and ſtrengthen the ſtomach, as infuſions of the bark, with other bitter and aſtringent ingredients, in white wine. Such perſons ought likewiſe to take frequently a glaſs or two of old red port, or good claret.

From whatever cauſe a looſeneſs proceeds, when it is found neceſſary to check it, the diet ought to conſiſt of rice boiled with milk, and flavoured with cinnamon;

rice jelly, ſago, with red port; and the lighter ſorts of fleſh meats roaſted. The drink may be thin water gruel, rice water, or thin broth made from lean veal, or with a ſheep's head, as being more gelatinous than mutton, beef, or chicken broth.

Perſons who from a peculiar weakneſs, or too great an irritability of the bowels, are liable to frequent returns of this diſeaſe, ſhould live temperately, avoiding crude ſummer fruits, all unwholeſome foods, and meats of hard digeſtion; they ought likewiſe to beware of cold, moiſture, or whatever may obſtruct the perſpiration, and ſhould wear flannel next the ſkin; all violent paſſions, as fear, anger, &c. are likewiſe carefully to be guarded againſt.

OF VOMITING.

Vomiting may proceed from various cauſes, as exceſs in eating and drinking, foulneſs of the ſtomach, the acrimony of the aliment, a tranſlation of the morbific matter of ulcers, of the gout, the eryſipelas, or other diſeaſes to the ſtomach. It may likewiſe proceed from a looſeneſs being too ſuddenly ſtopped, from the ſtoppage of any cuſtomary evacuation, as the bleeding piles, the menſes, &c. from a weakneſs of the ſtomach, the colic, the iliac paſſion, a rupture, a fit of the gravel, worms, or from any kind of poiſon taken into the ſtomach. It is an uſual ſymptom of injuries done to the brain; as contuſions, compreſſions, &c. It is likewiſe a ſymptom of wounds, or inflammation of the diaphragm, inteſtines, ſpleen, liver, kidneys, &c.

Vomiting may be occaſioned by unuſual motions, as ſailing, by being drawn backwards in a cart or coach, &c. It may likewiſe be excited by violent passions, or by the idea of nauſeous or diſagreeable objects, eſpecially of ſuch things as have formerly produced vomiting; ſometimes it proceeds from a regurgitation of the bile into the ſtomach; in this caſe what the patient vomits is generally of a yellow or greeniſh colour, and has a bitter taſte. Perſons who are ſubject to nervous affections are often

ſuddenly ſeized with violent fits of vomiting. Laſtly, vomiting is a common ſymptom of pregnancy. In this caſe it generally comes on about two weeks after the ſtoppage of the menſes, and continues during the firſt three or four months.

When vomiting proceeds from a foul ſtomach or indigeſtion, it is not to be conſidered as a diſeaſe, but as the cure of a diſeaſe. It ought, therefore, to be promoted by drinking lukewarm water, or thin gruel. If this does not put a ſtop to the vomiting, a doſe of ipecacuanha may be taken, and worked off with weak camomile-tea.

When the retroceſſion of the gout, or the obſtruction of cuſtomary evacuations, occaſion vomiting, all means muſt be uſed to reſtore their diſcharges; or if that cannot be affected, their place muſt be ſupplied by others, as bleeding, purging, bathing the extremities in warm water, opening iſſues, ſetons, perpetual bliſters, &c.

When vomiting is the affect of pregnancy, it may generally be mitigated by bleeding, and keeping the body gently open. The bleeding, however, ought to be in ſmall quantities at a time, and the purgatives ſhould be of the mildeſt kind, as figs, ſtewed prunes, manna, or ſenna. Pregnant women are moſt apt to vomit in the morning immediately after getting out of bed, which is owing partly to the change of poſture, but more to the emptineſs of the ſtomach. It may generally be prevented, by taking a diſh of coffee, tea, or ſome light breakfaſt in bed. Pregnant women who are afflicted with vomiting, ought to be kept eaſy both in body and mind. They ſhould neither allow their ſtomachs to be quite empty, nor ſhould they eat much at once. Cold water is a very proper drink in this caſe; if the ſtomach be weak, a little brandy may be added to it. If the ſpirits be low, and the perſon apt to faint, a ſpoonful of cinnamon-water, with a little marmalade of quinces or oranges, may be taken.

If vomiting proceeds from weakneſs of the ſtomach, bitters will be of ſervice. Peruvian bark infuſed in wine or brandy, with as much rhubarb as will keep

the body gently open, is an excellent medicine in this caſe. The elixir of vitriol is alſo a good medicine. It may be taken in the doſe of fifteen or twenty drops, twice or thrice a-day, in a glaſs of wine or water. Habitual vomitings are ſometimes alleviated by making oyſters a principal part of diet.

A vomiting which proceeds from acidities in the ſtomach, is relieved by alkaline purges. The beſt medicine of this kind is the magneſia alba, a tea ſpoonful of which may be taken in a diſh of tea, or a little milk, three or four times a-day, or oftener if neceſſary, to keep the body open.

When vomiting proceeds from violent paſſions or affections of the mind, all evacuants muſt be carefully avoided, eſpecially vomits. Theſe are exceedingly dangerous. The patient in this caſe ought to be kept perfectly eaſy aud quiet, to have the mind ſoothed, and to take ſome gentle cordial, as negus, or a little brandy and water, to which a few drops of laudanum may occaſionally be added.

When vomiting proceeds from ſpaſmodic affections of the ſtomach, muſk, caſtor, and other antiſpaſmodic medicines, are of uſe. Warm and aromatic plaſters have likewiſe a good effect. The ſtomach-plaſter of the London or Edinburgh diſpenſatory, may be applied to the pit of the ſtomach, or a plaſter of theriaca, will anſwer rather better; aromatic medicines may likewiſe be taken inwardly, as cinnamon or mint tea, wine and ſpices boiled in it, &c. The region of the ſtomach may be rubbed with æther, or if that cannot be had, with ſtrong brandy or other ſpirits. The belly ſhould be fomented with warm water, or the patient immerſed up to the breaſt in a warm bath.

I have always found the ſaline draughts taken in the act of effervescence, of ſingular uſe in ſtopping a vomiting, from whatever cauſe it proceeded. Theſe may be prepared by diſſolving a drachm of the ſalt of tartar, in an ounce and a half of freſh lemon-juice, and adding to it an ounce of peppermint water, the ſame quantity of ſimple cinnamon-water, and a little white ſugar.

This draught may be ſwallowed before the efferveſcence is quite over, and may be repeated every two hours, or oftener, if the vomiting be violent. A violent vomiting has ſometimes been ſtopped by cupping on the region of the ſtomach, after all other means had failed.

As the leaſt motion will often bring on the vomiting again, even after it has been ſtopped, the patient muſt avoid all manner of action. The diet muſt be ſo regulated as to ſit eaſy upon the ſtomach, and nothing ſhould be taken that is hard of digeſtion. We do not, however, mean that the patient ſhould live entirely upon ſlops. Solid food, in this caſe, often ſits eaſier on the ſtomach than liquids.

CHAP. XXXII.

OF THE DIABETES, AND OTHER DISORDERS OF THE KIDNEYS AND BLADDER.

THE diabetes is a frequent and exceſſive diſcharge of urine. It is ſeldom to be met with among young people; but often attacks perſons in the decline of life, eſpecially thoſe who follow the more violent employments, or have been hard drinkers in their youth.

CAUSES.——A diabetes is often the conſequence of acute diſeaſes, as fevers, fluxes, &c. where the patient has ſuffered by exceſſive evacuations: it may alſo be occaſioned by great fatigue or riding long journies upon a hard-trotting horſe, carrying heavy burdens, running, &c. It may be brought on by hard drinking, or the uſe of ſtrong ſtimulating diuretic medicines, as tincture of cantharides, ſpirits of turpentine, and ſuch like. It is often the effect of drinking too great quantities of mineral waters. Many imagine that theſe will do them no ſervice unleſs they be drank in great quantities, by which miſtake it often happens that they occaſion worſe diſeaſes than thoſe they were intended to

cure. In a word, this diſeaſe may either proceed from too great laxity of the organs which ſecrete the urine, from ſomething that ſtimulates the kidneys too much, or from a thin diſſolved ſtate of the blood, which makes too great a quantity of it run off by the urinary paſſages.

SYMPTOMS.——In a diabetes, the urine generally exceeds in quantity all the liquid food which the patient takes. It is thin and pale, of a ſweetiſh taſte, and an agreeable ſmell. The patient has a continual thirſt, with ſome degree of fever; his mouth is dry, and he ſpits frequently a frothy ſpittle. The ſtrength fails, the appetite decays, and the fleſh waſtes away till the patient is reduced to ſkin and bone. There is a heat of the bowels; and frequently the loins, teſticles, and feet are ſwelled.

This diſeaſe may generally be cured at the beginning; but after it has continued long, the cure becomes very difficult. In drunkards, and very old people, a perfect cure is not to be expected.

REGIMEN.——Every thing that ſtimulates the urinary paſſages or tends to relax the habit, muſt be avoided. For this reaſon the patient ſhould live chiefly on ſolid food. His thirſt may be quenched with acids; as ſorrel, juice of lemon, or vinegar. The mucilaginous vegetables, as rice, ſago, and ſalop, with milk, are the moſt proper food. Of animal ſubſtances, ſhell-fiſh are to be preferred; oyſters, crabs, &c.

The drink may be Briſtol-water. When that cannot be obtained, lime water, in which a due proportion of oak-bark has been macerated, may be uſed. The white decoction †, with iſinglaſs diſſolved in it, is likewiſe a very proper drink.

The patient ought daily to take exerciſe, but it ſhould be ſo gentle as not to fatigue him. He ſhould lie upon a hard bed or matraſs. Nothing hurts the kidneys more than lying too ſoft. A warm dry air, the uſe of the fleſh bruſh, and every thing that promotes

† See Appendix, *White Decoction.*

perſpiration, is of ſervice. For this reaſon the patient ought to wear flannel next his ſkin. A large ſtrengthening-plaſter may be applied to the back; or what will anſwer better, a great part of the body may be wrapped in plaſter.

MEDICINE.——Gentle purges, if the patient be not too much weakened by the diſeaſe, have a good effect. They may conſiſt of rhubarb, with cardamum ſeeds, or any other ſpiceries infuſed in wine, and may be taken in ſuch quantities as to keep the body gently open.

The patient muſt next have recourſe to aſtringents and coroborants. Half a drachm of powder made of equal parts of alum and the inſſpiſated juice, commonly called *Terra Japonica*, may be taken four times a-day or oftener, if the ſtomach will bear it. The alum muſt firſt be melted in a crucible; afterwards they may both be pounded together. Along with every doſe of this powder the patient may take a tea-cupful of the tincture of roſes†.

If the patient's ſtomach cannot bear the alum in ſubſtance, whey may be made of it, and taken in the doſe of a tea-cupful three or four times a-day. The alum-whey is prepared by boiling two Engliſh quarts of milk over a ſlow fire, with three drachms of alum, till the curd ſeparates.

Opiates are of ſervice in this diſeaſe, even though the patient reſts well. They take off ſpaſm and irritation, and at the ſame time leſſen the force of the circulation. Ten or twelve drops of liquid laudanum may be taken in a cup of the patient's drink three or four times a-day.

The beſt corroborants which we know, are the Peruvian bark and wine. A drachm of bark may be taken in a glaſs of red port or claret three times a-day. The medicine will be both more efficacious and leſs diſagreeable, if fifteen or twenty drops of the acid elixir of vitriol be added to each doſe. Such as cannot take the bark in ſubſtance, may uſe the decoction, mixed

† See Appendix, *Tincture of Roſes.*

with an equal quantity of red wine, and ſharpened as above.

There is a diſeaſe incident to labouring people in the decline of life, called *an Incontinency of Urine.* But this is very different from a diabetes, as the water paſſes off involuntary by drops, and does not exceed the uſual quantity. This diſeaſe is rather troubleſome than dangerous. It is owing to a relaxation of the ſpincter of the bladder, and is often the effect of a palſy. Sometimes it proceeds from hurts, or injuries occaſioned by blows, bruiſes, preternatural labours, &c. Sometimes it is the effect of a fever. It may likewiſe be occaſioned by a long uſe of ſtrong diuretics, or of ſtimulating medicines injected into the bladder.

This diſeaſe may be mitigated by the uſe of aſtringent and corroborating medicines, ſuch as have been mentioned above; but we do not remember ever to have ſeen it cured.

In an incontinency of urine, from whatever cauſe, a piece of ſponge ought to be worn, or a bladder applied in ſuch a manner as to prevent the urine from galling and excoriating the parts.

OF A SUPPRESSION OF URINE.

It has already been obſerved that a ſuppreſſion of urine may proceed from varions cauſes; as an inflammation of the kidneys, or bladder; ſmall ſtones or gravel lodging in the urinary paſſages, hard fœces lying in the rectum, pregnancy, a ſpaſm or contraction of the neck of the bladder, clotted blood in the bladder itſelf, a ſwelling of the hæmorrhoidal veins, &c.

Some of theſe caſes require the catheter, both to remove the obſtructing matter, and to draw off the urine; but as this inſtrument can only be managed with ſafety by perſons ſkilled in ſurgery, we ſhall ſay nothing further of its uſe. A bougee may be uſed by any cautious hand, and will often ſucceed better than the catheter.

We would chiefly recommend in all obſtructions of urine, fomentations and evacuants. Bleeding, as far as

the patient's ſtrength will permit, is neceſſary, eſpecially where there are ſymptoms of topical inflammation. Bleeding in this caſe not only abates the fever, by leſſening the force of the circulation, but, by relaxing the ſolids, it takes off the ſpaſm or ſtricture upon the veſſels, which occaſioned the obſtruction.

After bleeding, fomentations muſt be uſed. Theſe may either conſiſt of warm water alone, or of decoctions of mild vegetables; as mallows, camomile flowers, &c. Cloths dipped in theſe may either be applied to the part affected, or a large bladder filled with the decoction may be kept continually upon it. Some put the herbs themſelves into a flannel bag, and apply them to the part, which is far from being a bad method. Theſe continue longer warm than cloths dipped in the decoction, and at the ſame time keep the part equally moiſt.

In all obſtructions of urine, the body ought to be kept open. This is not, however, to be attempted by ſtrong purgatives, but by emollient clyſters, or gentle infuſions of ſenna and manna. Clyſters in this caſe not only open the body, but anſwer the purpoſe of an internal fomentation, and greatly aſſiſt in removing the ſpaſms of the bladder and parts adjacent.

The food muſt be light and taken in ſmall quantities. The drink may be weak broth or decoctions and infuſions of mucilaginous vegetables, as marſh-mallow roots, lime-tree buds, &c. A tea-ſpoonful of the ſweet ſpirits of nitre, or a drachm of Caſtile ſoap, may be frequently put into the patient's drink; and, if there be no inflammation, he may drink ſmall gin-punch.

Perſons ſubject to a ſuppreſſion of urine ought to live very temperate. Their diet ſhould be light, and their liquor diluting. They ſhould avoid all acid and auſtere wines, ſhould take ſufficient exerciſe, lie hard, and avoid ſtudy and ſedentary occupations.

OF THE GRAVEL AND STONE.

When ſmall ſtones are lodged in the kidneys, or diſ-

charged along with the urine, the patient is ſaid to be afflicted with the gravel. If one of theſe ſtones happen to make a lodgment in the bladder for ſome time, it accumulates freſh matter, and at length becomes too large to paſs off with the urine. In this caſe the patient is ſaid to have the ſtone.

CAUSES.——The ſtone and gravel may be occaſioned by high living; the uſe of ſtrong aſtringent wines; a ſedentary life; lying too hot, ſoft, or too much on the back; the conſtant uſe of water impregnated with earthy or ſtony particles; aliments of an aſtringent or windy nature, &c. It may likewiſe proceed from an hereditary diſpoſition. Perſons in the decline of life, and thoſe who have been much afflicted with the gout or rheumatiſms, are moſt liable to it.

SYMPTOMS.——Small ſtones or gravel in the kidneys occaſion pain in the loins, ſickneſs, vomiting, and ſometimes bloody urine. When the ſtone deſcends into the ureter, and is too large to paſs along with eaſe, all the above ſymptoms are increaſed; the pain extends towards the bladder; the thigh and leg of the affected ſide are benumbed; the teſticles are drawn upwards, and the urine is obſtructed.

A ſtone in the bladder is known from a pain at the time, as well as before and after making water; from the urine coming away by drops, or ſtopping ſuddenly when it was running in full ſtream; by a violent pain in the neck of the bladder upon motion, eſpecially on horſeback, or in a carriage on a rough road; from a white, thick, copious ſtinking mucous ſediment in the urine; from an itching in the top of the penis; from bloody urine; from an inclination to go to ſtool during the diſcharge of urine; from the patient's paſſing his urine more eaſily when lying than in an erect poſture; from a kind of convulſive motion occaſioned by the ſharp pain in diſcharging the laſt drops of the urine; and laſtly, from ſounding or ſearching with the catheter.

REGIMEN.——Perſons afflicted with the gravel or ſtone ſhould avoid aliments of a windy or heating nature, as ſalt meats, ſour fruits, &c. Their diet ought chiefly

to conſiſt of ſuch things as tend to promote the ſecretion of urine, and to keep the body open. Artichokes, aſparagus, ſpinage, lettuce, parſley, ſuccory, purſlane, turnips, potatoes, carrots, and radiſhes, may be ſafely eaten. Onions, leeks, and cellery are, in this caſe, reckoned medicinal. The moſt proper drinks are whey, butter-milk, milk and water, barley water; decoctions or infuſions of the roots of marſh-mallows, parſley, liquorice, or of other mild mucilaginous vegetables, as linſeed, lime-tree buds or leaves, &c. If the patient has been accuſtomed to generous liquors, he may drink weak gin and water.

Gentle exerciſe is proper; but violent motion is apt to occaſion bloody urine. We would therefore adviſe that it ſhould be taken in moderation. Perſons afflicted with gravel often paſs a great number of ſtones after riding on horſeback, or in a carriage, but thoſe who have a ſtone in the bladder are ſeldom able to bear theſe kinds of exerciſe. Where there is a hereditary tendency to this diſeaſe, a ſedentary life ought never to be indulged. Were people careful, upon the firſt ſymptoms of gravel, to obſerve a proper regimen of diet, and to take ſufficient exerciſe, it might often be carried off, or at leaſt prevented from encreaſing; but if the ſame courſe which occaſioned the diſeaſe is perſiſted in, it muſt be aggravated.

MEDICINE.—In what is called a fit of the gravel, which is commonly occaſioned by a ſtone ſticking in the *ureter*, or ſome part of the urinary paſſages, the patient muſt be bled: warm fomentations ſhould likewiſe be applied to the part affected, emollient clyſters adminiſtered, and diluting mucilaginous liquors drank, &c. The treatment of this caſe has been fully pointed out under the articles *inflammations of the kidneys and bladder*, to which we refer.

Dr. Whyte adviſes patients who are ſubject to frequent fits of gravel in the kidneys, but have no ſtone in the bladder, to drink every morning, two or three hours before breakfaſt, an Engliſh pint of oyſter or cockle-ſhell lime-water. The doctor very juſtly obſerves that

though this quantity might be too ſmall to have any ſenſible effect in diſſolving a ſtone in the bladder, yet it may very probably prevent its growth.

When a ſtone is formed in the bladder, the doctor recommends Spaniſh ſoap, and oyſter or cockel ſhell lime-water ‡, to be taken in the following manner: The patient muſt ſwallow every day, in any form that is leaſt diſagreeable, an ounce of the internal part of Alicant ſoap, and drink three or four Engliſh pints of oyſter or cockel ſhell lime water; the ſoap is to be divided into three doſes; the largeſt to be taken faſting in the morning early, the ſecond at noon, and the third at ſeven in the evening, drinking above each doſe a large draft of the lime water; the remainder of which he may take any time betwixt dinner and ſupper, inſtead of other liquors.

The patient ſhould begin with a ſmaller quantity of the lime water and ſoap than that mentioned above; at firſt an Engliſh pint of the former, and threee drams of the latter may be taken daily; this quantity, however, he may increaſe by degrees, and ought to perſevere in the uſe of theſe medicines, eſpecially if he finds any abatement of his complaints, for ſeveral months; nay, if the ſtone be very large, for years. It may likewiſe be proper for the patient, if he be ſeverely pained, not only to begin with the ſoap and lime water in ſmall quantities, but to take the ſecond or third lime water inſtead of the firſt. However, after he has been for ſome time accuſtomed to theſe medicines, he may not only take the firſt water, but if he finds he can eaſily bear it, heighten its diſſolving power ſtill more by pouring it a ſecond time on freſh calcined ſhells.

The cauſtic alcali or ſoap lees, is the medicine chiefly in vogue at preſent for the ſtone; it is of a very acrid nature, and ought therefore to be given in ſome gelatinous or mucilaginous liquor, as veal broth, new milk, linſeed tea, a ſolution of gum arabic, or a decoction of marſhmallow roots; the patient muſt begin with ſmall

‡ See Appendix, *Lime Water*.

doſes of the lees, as thirty or forty drops, and increaſe by degrees, as far as the ſtomach can bear it *.

Though the ſoap-lees and lime-water are the moſt powerful medicines which have hitherto been diſcovered for the ſtone; yet there are ſome things of a more ſimple nature, which in certain caſes are found to be beneficial, and therefore deſerve a trial. An infuſion of the ſeeds of daucus ſylveſtris, or wild carrot, ſweetened with honey, has been found to give conſiderable eaſe in caſes where the ſtomach could not bear any thing of an acrid nature. A decoction of raw coffee berries taking morning and evening, to the quantity of eight or ten ounces, with ten drops of ſweet ſpirits of nitre, has likewiſe been found very efficacious in bringing away large quantities of earthy matter in flakes. Honey is likewiſe found to be of conſiderable ſervice, and may be taken in gruel, or in any other form that is more agreeable.

The only other medicine which we ſhall mention is the uva urſi. It has been greatly extolled of late both for the gravel and ſtone. It ſeems, however, to be in all reſpects inferior to the ſoap and lime-water; but it is leſs diſagreeable, and has frequently to my knowledge, relieved gravelly complaints. It is generally taken in powder from half a drachm to a whole drachm, two or three times a-day. It may, however, be taken to the quantity of ſeven or eight drachms a-day, with great ſafety and good effect.

No means have hitherto been deviſed for removing the tormenting diſorder of the ſtone in the bladder. There is on record a fact on this ſubject, which conſpicuouſly proves with what caution the efficacy of ſpecifics is to be believed. The Britiſh parliament paid five thouſand pounds for a pretended ſolvent for the ſtone, long ſince totally forgotten. If they ſuffered themſelves to be deceived, how much more eaſy is it to

* The cuaſtic alkali may be prepared by mixing two parts of quicklime with one of pot-aſhes, and ſuffering them to ſtand till the lixivium be formed, which muſt be carefully filtrated before it be uſed. If the ſolution does not happen readily, a ſmall quantity of water may be added to the mixture.

delude the public in general, who take the lies and forgeries of the quacks as goſpel.

It is by no means, however, intended to be aſſerted, that experiments ſhould be diſcontinued, as a ſolvent may yet be diſcovered; though there is little reaſon to hope that any medicine will be diſcovered, ſo powerful as to diſſolve the harder ſtones without deſtroying the bladder.

Small ſtones having got into the urethra, have been brought away by means of a bent probe. And they have been ſometimes brought down by riding on a hard-trotting horſe, or in a carriage on a rough road.

Perſons troubled with this diſorder, ſhould not too long delay the operation of cutting. When it is aſcertained that there is a ſtone in the bladder, too large to get along the uretha, it ſhould be cut out immediately, as it will quickly increaſe, ſo that it cannot be extracted without a laceration of the parts, and that too at a time when the patient's habit has become too irritable.

CHAP. XXXI.

OF INVOLUNTARY DISCHARGES OF BLOOD.

SPONTANEOUS or involuntary diſcharges of blood often happen from various parts of the body. Theſe, however, are ſo far from being always dangerous, that they often prove ſalutary. When ſuch diſcharges are critical, which is frequently the caſe in fevers, they ought not to be ſtopped. Nor, indeed, is it proper at any time to ſtop them, unleſs they be ſo great as to endanger the patient's life. Moſt people, afraid of the ſmalleſt diſcharge of blood from any part of the body, fly immediately to the uſe of ſtyptic and aſtringent medicines, by which means an inflammation of the brain, or ſome other fatal diſeaſe, is occaſioned, which, had the diſ-

charge been allowed to go on, might have been prevented.

Periodical diſcharges of blood, from whatever part of the body they proceed, muſt not be ſtopped. They are always the efforts of Nature to relieve herſelf; and fatal diſeaſes have often been the conſequence of obſtructing them. It may, indeed, be ſometimes neceſſary to check the violence of ſuch diſcharges; but even this requires the greateſt caution. Inſtances might be given where the ſtopping of a ſmall periodical flux of blood from one of the fingers has proved fatal.

In the early period of life, bleeding at the noſe is very common. Thoſe who are farther advanced in years are more liable to hæmoptoe, or diſcharge of blood from the lungs. After the middle period of life, hæmorrhoidal fluxes are moſt common; and in the decline of life diſcharges of blood from the urinary paſſages.

Involuntary fluxes of blood may proceed from very different, and often from quite oppoſite cauſes. Sometimes they are owing to a particular conſtruction of the body, as a ſanguine temperament, a laxity of the veſſels, a plethoric habit, &c. At other times they proceed from a determination of the blood towards one particular part, as the head, the hæmorrhoidal veins, &c. They may likewiſe proceed from an inflammatory diſpoſition of the blood, in which caſe there is generally ſome degree of fever: this likewiſe happens when the flux is occaſioned by an obſtructed perſpiration, or a ſtricture upon the ſkin, the bowels, or any particular part of the ſyſtem.

But a diſſolved ſtate of the blood will likewiſe occaſion hæmorrhages. Thus in putrid fevers, the dyſentery, the ſcurvey, the malignant ſmall-pox, &c. there are often very great diſcharges of blood from different parts of the body. They may likewiſe be brought on by too liberal an uſe of medicines which tend to diſſolve the blood, as cantharides, the volatile alkaline ſalts, &c. Food of an acrid or irritating quality may likewiſe occaſion hæmorrhages; as alſo ſtrong purges and vomits, or any thing that greatly ſtimulates the bowels.

Violent paſſions or agitations of the mind, will likewiſe have this effect. Theſe often cauſe bleeding at the noſe, and I have known them ſometimes occaſion an hæmorrhage in the brain. Violent efforts of the body, by overſtraining or hurting the veſſels, may have the ſame effect, eſpecially when the body is long kept in an unnatural poſture, as hanging the head very low, &c.

The cure of an hæmorrhage muſt be adapted to its cauſe. When it proceeds from too much blood, or a tendency to inflammation, bleeding, with gentle purges and other evacuations, will be neceſſary. It will, likewiſe, be proper for the patient in this caſe to live chiefly upon a vegetable diet, to avoid all ſtrong liquors, and food that is of an acrid, hot, or ſtimulating quality. The body ſhould be kept cool, and the mind eaſy.

When an hæmorrhage is owing to a putrid or diſſolved ſtate of the blood, the patient ought to live chiefly upon acid fruits with milk, and vegetables of a nouriſhing nature, as ſago, ſalop, &c. His drink may be wine diluted with water, and ſharpened with the juice of lemon, vinegar, or ſpirits of vitriol. The beſt medicine in this caſe is the Peruvian bark, which may be taken according to the urgency of the ſymptoms.

When a flux of blood is the effect of acrid food, or of ſtrong ſtimulating medicines, the cure is to be effected by ſoft and mucilaginous diet. The patient may likewiſe take frequently about the bulk of a nutmeg of Locatelli's balſam, or the ſame quantity of ſpermaceti.

When an obſtructed perſpiration, or a ſtricture upon any part of the ſyſtem, is the cauſe of an hæmorrhage, it may be removed by drinking warm diluting liquors, lying a-bed, bathing the extremities in warm water, &c.

OF BLEEDING AT THE NOSE.

Bleeding at the noſe is commonly preceded by ſome degree of quickneſs of the pulſe, flushing in the face, pulſation in the temporal arteries, heavineſs in the head, dimneſs of the ſight, heat and itching of the noſtrils, &c.

To perſons who abound in blood, this diſcharge is very ſalutary. It often cures a vertigo, the head-ach, a phrenzy, and even an epilepſy. In fevers, where there is a great determination of blood towards the head, it is of the utmoſt ſervice. It is likewiſe beneficial in inflammations of the liver and ſpleen, and often in the gout and rheumatiſm. In all diſeaſes where bleeding is neceſſary, a ſpontaneous diſcharge of blood from the noſe is of much more ſervice than the ſame quantity let with a lancet.

In a diſcharge of blood from the noſe, the great point is to determine whether it ought to be ſtopped or not. It is a common practice to ſtop the bleeding, without conſidering whether it be a diſeaſe, or the cure of a diſeaſe. This conduct proceeds from fear; but it has often bad, and ſometimes fatal conſequences.

When a diſcharge of blood from the noſe happens in an inflammatory diſeaſe, there is always reaſon to believe that it may prove ſalutary: and therefore it ſhould be ſuffered to go on, at leaſt as long as the patient is not weakened by it.

When it happens to perſons in perfect health, who are full of blood, it ought not to be ſuddenly ſtopped, eſpecially if the ſymptoms of plethora, mentioned above, have preceded it. In this caſe it cannot be ſtopped without riſking the patient's life.

In fine, whenever bleeding at the noſe relieves any bad ſymptom, and does not proceed ſo far as to endanger the patient's life, it ought not to be ſtopped. But when it returns frequently, or continues till the pulſe becomes low, the extremities begin to grow cold, the lips pale, or the patient complains of being ſick or faint, it muſt immediately be ſtopped.

For this purpoſe the patient ſhould be ſet nearly upright, with his head reclining a little, and his legs immerſed in water about the warmth of new milk. His hands ought likewiſe to be put in lukewarm water, and his garters may be tied a little tighter than uſual. Ligatures may be applied to the arms, about the place where they are uſually made for bleeding, and with

nearly the ſame degree of tightneſs. Theſe muſt be gradually ſlackened as the blood begins to ſtop, and removed entirely as ſoon as it gives over.

Sometimes dry lint put up the noſtrils will ſtop the bleeding. When this does not ſucceed, doſſils of lint dipped in ſtrong ſpirits of wine may be put up the noſtrils, or if that cannot be had, they may be dipped in brandy. Blue vitriol diſſolved in water may likewiſe be uſed for this purpoſe, or a tent dipped in the white of an egg well beat up, may be rolled in a powder made of equal parts of white ſugar, burnt alum, and white vitriol, and put up the noſtrils from whence the blood iſſues.

Internal medicines can hardly be of uſe here, as they have ſeldom time to operate. It may not, however, be amiſs to give the patient half an ounce of Glauber's ſalt, and the ſame quantity of manna, diſſolved in four or five ounces of barley-water. This may be taken at a draught and repeated if it does not operate in a few hours. Ten or twelve grains of nitre may be taken in a glaſs of cold water and vinegar every hour, or oftener if the ſtomach will bear it. If a ſtronger medicine be neceſſary, a tea-cupful of the tincture of roſes, with twenty or thirty drops of the weak ſpirit of vitriol, may be taken every hour. When theſe things cannot be had, the patient may drink water with a little common ſalt in it, or equal parts of water and vinegar.

If the genitals be immerſed for ſometime in cold water, it will generally ſtop a bleeding at the noſe. I have not known this fail.

Sometimes, when the bleeding is ſtopped outwardly it continues inwardly. This is very troubleſome, and requires particular attention, as the patient is apt to be ſuffocated with the blood, eſpecially if he falls aſleep, which he is very ready to do after loſing a great quantity of blood.

When the patient is in danger of ſuffocation from the blood getting into his throat, the paſſages may be ſtopped by drawing threads up the noſtrils, and bringing them out at the mouth, then faſtening pieces of ſponge, or

mall rolls of linen cloth to their extremities, afterwards drawing them back and tying them to the outside with a ſufficient degree of tightneſs.

After the bleeding is ſtopped, the patient ought to be kept as eaſy and quiet as poſſible. He ſhould not pick his noſe, nor take away the tents or clotted blood till they fall off of their own accord, and ſhould not lie with his head low.

Thoſe who are afflicted with frequent bleeding at the noſe, ought to bathe their feet often in warm water, and keep them warm and dry. They ought to wear nothing tight about their necks, to keep the body as much in an erect poſture as poſſible, and never to view any object obliquely. If they have too much blood, a vegetable diet, with now and then a cooling purge, is the ſafeſt way to leſſen it.

But when the diſeaſe proceeds from a thin diſſolved ſtate of the blood, the diet ſhould be rich and nouriſhing, as ſtrong broths and jellies, ſago gruel with wine and ſugar, &c. Infuſions of the Peruvian bark in wine ought likewiſe to be taken, and perſiſted in for a conſiderable time.

OF THE BLEEDING AND BLIND PILES.

A diſcharge of blood from the hæmorrhoidal veſſels is called the Bleeding Piles. When the veſſels only ſwell, and diſcharge no blood, but are exceeding painful, the diſeaſe is called the Blind Piles.

Perſons of a looſe ſpongy fibre, of a bulky ſize, who live high, and lead a ſedentary inactive life, are moſt ſubject to this diſeaſe. It is often owing to an hereditary diſpoſition. When this is the caſe, it attacks perſons more early in life than when it is accidental. Men are more liable to it than women, eſpecially thoſe of a ſanguine, plethoric, or a ſcorbutic habit, or of a melancholy diſpoſition.

The piles may be occaſioned by an exceſs of blood, by ſtrong aloetic purges, high ſeaſoned food, drinking great quantities of ſweet wines, the neglect of bleeding or other cuſtomary evacuations, much riding, great

coſtiveneſs, or any thing that occaſions hard or difficult ſtools. Anger, grief, or other violent paſſions, will likewiſe occaſion the piles. I have often known them brought on by ſitting on the damp ground; a pair of thin breeches will excite the diſorder in a perſon who is ſubject to it, and ſometimes even in thoſe who never had it before. Pregnant women are often afflicted with the piles.

A flux of blood from the anus is not always to be treated as a diſeaſe. It is even more ſalutary than bleeding at the noſe, and often prevents or carries off diſeaſes. It is peculiarly beneficial in the gout, rheumatiſm, aſthma, and hypochondriacal complaints, and often proves critical in colics and inflammatory fevers.

In the management of the patient, regard muſt be had to his habit of body, his age, ſtrength, and manner of living. A diſcharge which might be exceſſive and prove hurtful to one, may be very moderate and even ſalutary to another. That only is to be eſteemed dangerous which continues too long, and is in ſuch quantity as to waſte the patient's ſtrength, hurt the digeſtion, nutrition, and other functions neceſſary to life.

When this is the caſe the diſcharge muſt be checked by a proper regimen and aſtringent medicines. The DIET muſt be cool but nouriſhing, conſiſting chiefly of bread, milk, cooling, vegetables, and broths. The DRINK may be chalybeate water, orange whey, decoctions or infuſions of the aſtringent and mucilaginous plants, as the tormentil root, biſtort and marſhmallow roots, &c.

Old conſerve of red roſes is a very good medicine in this caſe. It may be mixed with new milk, and taken in the quantity of an ounce three or four times a-day. This medicine is in no great repute, owing to its being ſeldom taken in ſuch quantity as to produce any effects; but when taken as here directed, and duly perſiſted in, I have known it perform very extraordinary cures in violent hæmorahages, eſpecially when aſſiſted by the tincture of roſes; a tea-cupful of which may be taken about an hour after every doſe of the conſerve.

The Peruvian bark is likewiſe proper in this caſe,

as a ſtrengthener and aſtringent. Half a drachm of it may be taken in a glaſs of red wine, ſharpened with a few drops of the elixir of vitriol, three or four times a-day.

The bleeding piles are ſometimes periodical, and return regularly once a-month, or once in three weeks. In this caſe they are always to be conſidered as a ſalutary diſcharge, and by no means to be ſtopped. Some have entirely ruined their health by ſtopping a periodical diſcharge of blood from the hæmorrhoidal veins.

In the blind piles, bleeding is generally of uſe. The diet muſt be light and thin, and the drink cool and diluting. It is likewiſe neceſſary that the body be kept gently open This may be done by ſmall doſes of the flower of brimſtone and cream of tartar. Theſe may be mixed in equal quantities, and a tea-ſpoonful taken two or three times a-day.

Emollient clyſters are here likewiſe beneficial; but there is ſometimes ſuch an aſtriction of the anus, that they cannot be thrown up. In this caſe I have known a vomit have a very good effect.

When the piles are exceeding painful and ſwelled, but diſcharge nothing, the patient muſt ſit over the ſteams of warm water. He may likewiſe apply a linen cloth dipped in warm ſpirits of wine to the part, or poultices made of bread and milk, or of leeks fried with butter. If theſe do not produce a diſcharge, and the piles appear large, leeches muſt be applied as near them as poſſible, or, if they will fix upon the piles themſelves, ſo much the better. When leeches will not fix, the piles may be opened with a lancet. The operation is very eaſy, and is attended with no danger.

Various ointments, and other external applications, are recommended in the piles; but I do not remember to have ſeen any effects from theſe worth mentioning. Their principal uſe is to keep the part moiſt, which may be done as well by a ſoft poultice, or an emollient cataplaſm. When the pain, however, is very great, a liniment made of two ounces of emollient ointment, and half an ounce of liquid laudanum, beat up with the yolk of an egg, may be applied.

Aloes, which form a principal ingredient of moſt of the advertiſed purgative pills, very frequently occaſion the piles. A ſpoonful of caſtor oil, taken occaſionally at night, is a much better, as well as a ſafer remedy for habitual coſtiveneſs.

A weak ſolution of lead with a little laudanum, is a good external remedy; as is alſo an ointment of two thirds hog's-lard, and one third galls finely pulveriſed. An injection of lime-water, or of an infuſion of galls, may be uſed with advantage when the piles are ſeated high.

The pain may be removed by an emetic, or by taking twice a-day thirty drops of balſam of copaiba on a bit of ſugar. A pile having a narrow neck is beſt extirpated by the knife; if it be large, or its baſis broad, a double ligature may be paſſed through, and tied on each ſide.

Piles ought to be duly attended to, otherwiſe they often produce a fiſtula. This painful diſorder may be diſcovered by ſtains on the linen, proceeding from a ſmall orifice near the anus. In this complaint, ſuch ſtimulants ſhould be applied as produce a more active inflammation on the ſides of the ulcer, ſo as to make them adhere together. With this view, irritating injections, properly perſiſted in, have been ſucceſsfully uſed. A wine-glaſs of ſea-water, taken every night for ſeveral weeks, has alſo been found uſeful.

But the only certain and radical cure is the knife. By the operation of cutting the ulcer is reduced to a ſimple wound, and healed as ſuch. The ſooner this operation is recurred to, the better; becauſe the diſorder gradually ſpreads in different directions through the cellular ſubſtance which ſurrounds the rectum, and new orifices are formed, which render it more difficult to be cured.

The beſt means of performing this operation is by inciſion. It is, however, alſo done by paſſing a thread of ſilk, or flexible gold wire, in at the external orifice of the fiſtula, and bringing it out

at the anus, then twiſting the ends together, and daily repeating this till it cuts its way out.

SPITTING OF BLOOD.

We mean here to treat of that diſcharge of blood from the lungs only which is called an *hæmoptoe* or *ſpitting of blood*. Perſons of a ſlender make, and a lax fibre, who have long necks and ſtrait breaſts, are more liable to this diſeaſe. It is moſt common in the ſpring, and generally attacks people before they arrive at the prime or middle of life. It is a common obſervation, that thoſe who have been ſubject to bleeding at the noſe when young, are afterwards moſt liable to an hæmoptoe.

CAUSES.——An hæmoptoe may proceed from exceſs of blood, from a peculiar weakneſs of the lungs, or a bad conformation of the breaſt. It is often occaſioned by exceſſive drinking, running, wreſtling, ſinging, or ſpeaking aloud. Such as have weak lungs ought to avoid all violent exertions of that organ, as they value life. They ſhould likewiſe guard againſt violent paſſions, exceſſive drinking, and every thing that occaſions a rapid circulation of the blood.

This diſeaſe may likewiſe proceed from wounds of the lungs. Theſe may either be received from without, or they may be occaſioned by hard bodies getting into the wind-pipe, and ſo falling down upon the lungs, and hurting that tender organ. The obſtructions of any cuſtomary evacuation may occaſion a ſpitting of blood; as neglect of bleeding or purging at the uſual ſeaſons, the ſtoppage of the bleeding piles in men, or the menſes, in women, &c. It may likewiſe proceed from a polipus, ſcirrhus concretions, or any thing that obſtructs the circulation of the blood in the lungs. It is often the effect of a long and violent cough; in which caſe it is generally the forerunner of a conſumption. A violent degree of cold ſuddenly applied to the external parts of the body will occaſion an hæmoptoe. It may likewiſe be occaſioned by breathing air which is too

much ratified to be able properly to expand the lungs. This is often the caſe with thoſe who work in hot places, as furnaces, glaſs houſes, or the like. It is likewiſe ſaid to happen to ſuch as aſcend to the top of very high mountains, as the Peak off Teneriff, &c.

Spitting of blood is not always to be conſidered as a primary diſeaſe. It is often only a ſymptom, and in ſome diſeaſes not an unfavourable one. This is the caſe in pleuriſies, peripneumonies, and ſundry other fevers. In a dropſy, ſcurvy, or conſumption, it is a bad ſymptom, and ſhews that the lungs are ulcerated.

SYMPTOMS.—Spitting of blood is generally preceded by ſenſe of weight, and oppreſſion of the breaſt, a dry tickling cough, hoarſeneſs, and a difficulty of breathing. Sometimes it is uſhered in with ſhivering, coldneſs of the extremities, coſtiveneſs, great laſſitude, flatulence, pain of the back and loins, &c. As theſe ſhew a general ſtricture upon the veſſels, and a tendency of the blood to inflammation, they are commonly the forerunners of a very copious diſcharge. The above ſymptoms do not attend a diſcharge of blood from the gums or fauces, by which means theſe may always be diſtinguiſhed from an hæmoptoe. Sometimes the blood that is ſpit up is thin, and of a florid red colour; and at other times it is thick, and of a dark or blackiſh colour; nothing however can be inferred from this circumſtance, but that the blood has lain a longer or ſhorter time in the breaſt before it was diſcharged.

Spitting of blood, in a ſtrong healthy perſon of a ſound conſtitution, is not very dangerous; but when it attacks the tender and delicate, or perſons of a weak lax fibre, it is with difficulty removed. When it proceeds from a ſcirrhus or polypus of the lungs, it is bad. The danger is greater when the diſcharge proceeds from the rupture of a large veſſel, than of a ſmall one. When the extravaſated blood is not ſpit up, but lodges in the breaſt, it corrupts, and greatly increaſes the danger. When the blood proceeds from an ulcer in the lungs, it is generally fatal.

REGIMEN.——The patient ought to be kept cool

and eaſy. Every thing that heats the blood, or quickens the circulation, increaſes the danger. The mind ought likewiſe to be ſoothed, and every occaſion of exciting the paſſions avoided. The diet ſhould be ſoft, cooling, and ſlender; as rice boiled with milk, ſmall broths, barley-gruels, panado, &c. The diet, in this caſe, can ſcarcely be too low. Even water-gruel is ſufficient to ſupport the patient for ſome days. All ſtrong liquors muſt be avoided. The patient may drink milk and water, barley-water, whey, butter-milk, and ſuch like. Every thing, however, ſhould be drank cold, and in ſmall quantities at a time. He ſhould obſerve the ſtricteſt ſilence, or at leaſt ſpeak with a very low voice.

MEDICINE.——This, like other involuntary diſcharges of blood, ought not to be involuntarily ſtopped by aſtringent medicines. More miſchief is often done by theſe, than if it were ſuffered to go on. It may, however, proceed ſo far as to weaken the patient, and even endanger his life; in which caſe proper means muſt be uſed for reſtraining it.

The body ſhould be kept gently open by laxative diet; as roaſted apples, ſtewed prunes, and ſuch like. If theſe ſhould not have the deſired effect, a tea-ſpoonful of the lenitive electuary may be taken twice or thrice a-day, as is found neceſſary. If the bleeding proves violent, ligatures may be applied to the extremities, as directed for bleeding at the noſe.

If the patient be hot or feveriſh, bleeding and ſmall doſes of nitre will be of uſe; a ſcruple, or half a drachm of nitre may be taken in a cup of his ordinary drink twice or thrice a-day. His drink may likewiſe be ſharpened with acids, as juice of lemon, or a few drops of the ſpirit of vitriol; or he may take frequently a cup of the tincture of roſes.

Bathing the feet and legs in lukewarm water, has likewiſe a very good effect in this diſeaſe. Opiates too are ſometimes beneficial; but theſe muſt be adminiſtered with caution. Ten or twelve drops of laudanum may be given in a cup of barley-water twice a-day, and con-

tinued for ſometime, provided they be found beneficial.

The conſerve of roſes is likewiſe a very good medicine in this caſe, provided it be taken in ſufficient quantity, nd long enough perſiſted in. It may be taken to the quantity of three or four ounces a-day; and, if the patient be troubled with a cough, it ſhould be made into an electuary, with balſamic ſyrup, and a little of the ſyrup of poppies.

If ſtronger aſtringents be neceſſary, fifteen or twenty drops of the elixir of vitriol may be given in a glaſs of water three or four times a-day.

Thoſe who are ſubject to frequent returns of this diſeaſe ſhould avoid all exceſs. Their diet ſhould be light and cool, conſiſting chiefly of milk and vegetables. Above all, let them beware of vigorous efforts of the body, and violent agitations of the mind.

VOMITING OF BLOOD.

This is not ſo common as the other diſcharges of blood which have already been mentioned; but it is very dangerous, and requires particular attention.

Vomiting of blood is generally preceded by pain of the ſtomach, ſickneſs, ane naufea; and is accompanied wih great anxiety, and frequent fainting fits.

This diſeaſe is ſometimes periodical; in which caſe it is leſs dangerous. It often proceeds from an obſtruction of the menſes in women; and ſometimes from the ſtopping of the hæmorrhoidal flux in men. It may be occaſioned by any thing that greatly ſtimulates or wounds the ſtomach, as ſtrong vomits or purges, acrid poiſons, ſharp or hard ſubſtances taken into the ſtomach, &c. It is often the effect of obſtructions in the liver, the ſpleen, or ſome of the other viſcera. It may likewiſe proceed from external violence, as blows or bruiſes, or from any of the cauſes which produce inflammation. In hyſteric women, vomiting of blood is a very common, but by no means a daugerous ſymptom.

A great part of the danger in this diſeaſe ariſes from the extravaſated blood lodging in the bowels, and be-

coming putrid, by which means a dyſentery or putrid fever may be occaſioned. The beſt way of preventing this, is to keep the body gently open, by frequently exhibiting emollient clyſters. Purges muſt not be given till the diſcharge is ſtopt, otherwiſe they will irritate the ſtomach, and increaſe the diſorder. All the food and drink muſt be of a mild cooling nature, and taken in ſmall quantities. Even drinking cold water has ſometimes proved a remedy, but it will ſucceed better when ſharpened with the weak ſpirits of vitriol. When there are ſigns of an inflammation, bleeding may be neceſſary; but the patient's weakneſs will ſeldom permit it. Opiates may be of uſe; but they muſt be given in very ſmall doſes, as four or five drops of liquid laudanum, twice or thrice a-day.

After the diſcharge is over, as the patient is generally troubled with gripes, occaſioned by the acrimony of the blood lodged in the inteſtines, gentle purges will be neceſſary.

OF BLOODY URINE.

This is a diſcharge of blood from the veſſels of the kidneys or bladder, occaſioned by their being either enlarged, broken, or eroded. It is more or leſs dangerous according to the different circumſtances which attend it.

When pure blood is voided ſuddenly, without interruption and without pain, it proceeds from the kidneys, but if the blood be in ſmall quantity, of a dark colour, and emitted with heat and pain about the bottom of the belly, it proceeds from the bladder. When bloody urine is occaſioned by a rough ſtone deſcending from the kidneys to the bladder, which wounds the ureter, it is attended with a ſharp pain in the back, and difficulty of making water. If the coats of the bladder are hurt by a ſtone, and the bloody urine follows, it is attended with the moſt acute pain, and a previous ſtoppage of urine.

Bloody urine may likewiſe be occaſioned by falls, blows, the lifting or carrying of heavy burdens, hard

riding, or any violent motion. It may alſo proceed from ulcers of the bladder, from a ſtone lodged in the kidneys, or from violent purges, or ſharp diuretic medicines, eſpecially cantharides.

Bloody urine is always attended with ſome degree of danger: but it is peculiarly ſo when mixed with purulent matter, as this ſhews an ulcer ſomewhere in the urinary paſſages. Sometimes this diſcharge proceeds from exceſs of blood, in which caſe it is rather to be conſidered as a ſalutary evacuation than a diſeaſe. If the diſcharge, however, be very great, it may waſte the patient's ſtrength, and occaſion an ill habit of body, a dropſy, or a conſumption.

The treatment of this diſorder muſt be varied according to the different cauſes from which it proceeds.

When it is owing to a ſtone in the bladder, the cure depends upon an operation, a deſcription of which would be foreign to our purpoſe.

If it be attended with a plethora, and ſymptoms of inflammation, bleeding will be neceſſary. The body muſt likewiſe be kept open by emollient clyſters, or cooling purgative medicines, as cream of tartar, rhubarb, manna, or ſmall doſes of lenitive electuary.

When bloody urine proceeds from a diſſolved ſtate of the blood, it is commonly the ſymptom of ſome malignant diſeaſe, as the ſmall-pox, a putrid fever, or the like. In this caſe the patient's life depends upon the liberal uſe of the Peruvian bark and acids, as has already been ſhewn.

Where there is reaſon to ſuſpect an ulcer in the kidneys or bladder, the patient's diet muſt be cool, and the drink of a ſoft, healing, balſamic quality, as decoctions of marſhmallow roots with liquorice, ſolutions of gum arabic, &c. Three ounces of marſhmallow roots, and half an ounce of liquorice, may be boiled in two Engliſh quarts of water to one; two ounces of gum arabic, and half an ounce of purified nitre, may be diſſolved in the ſtrained liquor, and a tea cupful of it taken four or five times a-day.

The early uſe of aſtringents in this diſeaſe has often

bad conſequences. When the flux is ſtopped too ſoon, the grumous blood, by being confined in the veſſels, may produce inflamnations, abceſs, and u'cers. If, however, the caſe be urgent, or the patient ſeems to ſuffer from the loſs of blood, gentle aſtringents may be neceſſary. In in this caſe the patient may take three or four ounces of lime-water, with half an ounce of the tincture of Peruvian bark, three times a-day.

OF THE DYSENTERY, OR BLOODY FLUX.

This diſeaſe prevails in the ſpring and autumn. It is moſt common in marſhy countries, where after hot and dry ſummers it is apt to become epidemic. Perſons are moſt liable to it who are much expoſed to the night-air or who live in places where the air is confined and unwholeſome. Hence it often proves fatal in camps, on ſhipboard, in jails, hoſpitals, and ſuch like places.

CAUSES.——The dyſentery may be occaſioned by any thing that obſtructs the perſpiration, or renders the humours putrid; as damp beds, wet cloths, unwholeſome diet, bad air, &c. but it is moſt frequently communicated by infection. This ought to make people extremely cautious in going near ſuch perſons as labour under the diſeaſe. Even the ſmell of the patient's excrements have been known to communicate the infection.

SYMPTOMS.——It is known by a flux of the belly attended by violent pain of the bowels, a conſtant inclination to go to ſtool, and generally more or leſs blood in the ſtools. It begins, like other fevers with chillneſs, loſs of ſtrentgh, a quick pulſe great thirſt and an inclination to vomit. The ſtools are at firſt greaſy and frothy, afterwards they are ſtreaked with blood, and at laſt have frequently the appearance of pure blood, mixed with ſmall filaments reſembling bits of ſkin. Worms are ſometimes paſſed both upwards and downwards through the whole courſe of the diſeaſe. When the patient goes to ſtool, he feels a bearing down, as if the whole bowels were falling out, and ſometimes a part of the inteſtine is

actually protruded, which proves exceeding troublesome, especially in children. Flatulency is likewise a troublesome symptom, especially towards the end of the disease.

The disease may be distinguished from a diarrhœa, or looseness, by the acute pain of the bowels, and the blood which generally appears in the stools. It may be distinguished from the *choler morbus* by its not being attended with such violent and frequent fits of vomitting, &c.

When the dysentery attacks the old, the delicate, or such as have been wasted by the gout, the scurvy, or other lingering diseases, it generally proves fatal. Vomiting and hiccuping are bad signs, as they shew an inflammation of the stomach. When the stools are green, black, or have an exceeding disagreeable cadaverous smell, the danger is very great, and it shews the disease to be of the putrid kind. It is an unfavourable symptom when clysters are immediately returned; but still more so when the passage is so obstinately shut, that they cannot be injected. A feeble pulse, coldness of the extremities, with difficulty of swallowing, and convulsions, are signs of approaching death.

REGIMEN.——Nothing is of more importance in this disease than cleanliness. It contributes greatly to the recovery of the patient, and no less to the safety of such as attend him. In all contagious diseases the danger is increased, and the infection spread, by the neglect of cleanliness; but in no one more than in this. Every thing about the patient should be frequently changed. The excrement should never be suffered to continue in his chamber, but removed immediately and buried under ground. A constant stream of fresh air should be admitted into the chamber; and it ought frequently to be sprinkled with vinegar, juice of lemon, or some other strong acid.

The patient must not be discouraged, but his spirits kept up in hopes of a cure. Nothing tends more to render any putrid disease mortal, than the fears and apprehensions of the sick. All diseases of this nature have

a tendency to ſink and depreſs the ſpirits, and when that is increaſed by fears and alarms from thoſe whom the patient believes to be perſons of ſkill, it cannot fail to have the worſt effects.

A flannel waiſtcoat worn next the ſkin has often a very good effect in the dyſentery. This promotes the perſpiration without over-heating the body. Great caution, however, is neceſſary in leaving it off. I have often known a dyſentery brought on by imprudently throwing off a flannel waiſtcoat before the ſeaſon was ſufficiently warm. For whatever purpoſe this piece of dreſs is worn, it ſhould never be left off but in a warm ſeaſon.

In this diſeaſe the greateſt attention muſt be paid to the patient's diet. Fleſh, fiſh, and every thing that has a tendency to turn putrid or rancid on the ſtomach, muſt be abſtained from. Apples boiled in milk, water-pap, and plain light pudding, with broth made of the gelatinous parts of animals, may conſtitute the principal part of the patient's food. Gelatinous broth not only anſwers the purpoſe of food, but likewiſe of medicine. I have often known dyſenteries, which were not of a putrid nature, cured by it, after pompous medicines had proved ineffectual *.

Another kind of food very proper in the dyſentery, which may be uſed by ſuch as cannot take the broth

* The manner of making this broth is, to take a ſheep's head and feet with the ſkin upon them, and to burn the wool off with a hot iron; afterwards to boil them till the broth is quite a jelly. A little cinnamon or mace may be added, to give the broth an agreeable flavour, and the patient may take a little of it warm with toaſted bread, three or four times a-day. Such as cannot use the broth made in this way, may have the head and feet skinned; but we have reaſon to believe that this hurts the medicine. It is not our buſineſs here to reaſon upon the nature and qualities of medicine, otherwiſe this might be ſhewn to poſſeſs virtues every way ſuited to the cure of a dyſentery which does not proceed from a putrid ſtate of the humours. One thing we know, which is preferrable to all reaſoning, that whole families have often been cured by it, after they had uſed many other medicines in vain. It will, however, be proper that the patient take a vomit, and a doſe or two of rhubarb, before he begins to uſe the broth. It will likewiſe be neceſſary to continue the uſe of it for a conſiderable time, and to make it the principal food.

mentioned above, is made by boiling a few handfuls of fine flour, tied in a cloth, for ſix or ſeven hours, till it becomes as hard as ſtarch. Two or three table-ſpoonfuls of this may be grated down, and boiled in ſuch a quantity of new milk and water as to be of the thickneſs of pap. This may be ſweetened to the patient's taſte, and taken for his ordinary food †.

In a *putrid dyſentery* the patient may be allowed to eat freely of moſt kinds of good ripe food; as apples, grapes, gooſeberries, currant-berries, ſtrawberries, &c. Theſe may either be eaten raw or boiled, with or without milk, as the patient chuſes. The prejudice againſt fruit in this diſeaſe is ſo great, that many believe it to be the common cauſe of dyſenteries. This, however, is an egregious miſtake. Both reaſon and experience ſhew, that good fruit is one of the beſt medicines, both for the prevention and cure of the dyſentery. Good fruit is in every reſpect calculated to counteract that tendency to putrefaction, from whence the moſt dangerous kinds of dyſentery proceeds. The patient in ſuch a caſe ought therefore to be allowed to eat as much as he pleaſes, provided it be ripe *.

† The learned and humane Dr. Rutherford, late profeſſor of medicine in the university of Edinburgh, used to mention this food in his public lectures with great encomiums. He directed it to be made by tying a pound or two of the finest flour, as tight as possible, in a linen rag, afterwards to dip it frequently in water, and to dridge the outside with flour, till a cake or crust was formed around it, which prevents the water from soaking in it while boiling. It is then to be boiled till it becomes a hard dry mass, as directed above. This, when mixed with milk and water, will not only answer the purpose of food, but may likewise be given in clysters.

* I lately saw a young man who had been seized with a dysentery in North America. Many things had been tried there for his relief, but to no purpose. At length, tired out with disappointments from medicine, and reduced to skin and bone, he came over to Britain, rather with a view to die among his relations, than with any hopes of a cure. After taking sundry medicines here with no better success than abroad, I advised him to leave off the use of drugs, and to trust entirely to a diet of milk and fruits, with gentle exercise. Strawberries were the only fruit he could procure at that season. These he ate with milk twice, and sometimes thrice a-day. The consequence was, that in a short time his stools were reduced from upwards of twenty in

The moſt proper drink in this diſorder is whey. The dyſentery has often been cured by the uſe of clear whey alone. It may be taken both for drink, and in form of a clyſter. When whey cannot be had, barley-water ſharpened with cream of tartar may be drank, or a decoction of barley and tamarinds; two ounces of the former and one of the latter may be boiled in two Engliſh quarts of water to one. Warm water, water-gruel, or water wherein hot irons has been frequently quenched, are all very proper, and may be drank in turns. Camomile-tea, if the ſtomach will bear it, is an exceeding proper drink. It both ſtrengthens the ſtomach, and by its antiſeptic quality tends to prevent a mortification of the bowels.

MEDICINE.——At the beginning of this diſeaſe it is always neceſſary to cleanſe the firſt paſſages. For this purpoſe a vomit of ipecacuanha muſt be given, and wrought off with weak camomile-tea. Strong vomits are ſeldom neceſſary here. A ſcruple, or at moſt half a drachm of ipecacuanha, is generally ſufficient for an adult, and ſometimes a very few grains will ſuffice. The day after the vomit, half a drachm, or two ſcruples of rhubarb, muſt be taken; or, what will anſwer the purpoſe rather better, an ounce, or an ounce and a half of Epſom ſalts. This doſe may be repeated every other day for two or three times. Afterwards ſmall doſes of ipecacuanha may be taken for ſome time. Two or three grains of the powder may be mixed in a table ſpoonfull of the ſyrup of poppies, and taken three times a-day.

Theſe evacuations, and the regimen preſcribed above, will often be ſufficient to effect a cure. Should it, however, happen otherwiſe, the following aſtringent medicines may be uſed:

A clyſter of ſtarch or fat mutton broth, with thirty or forty drops of liquid laudanum in it, may be adminiſtered

a-day, to three or four, and ſometimes not ſo many. He used the other fruits as they came in, and was in a few weeks so well as to leave that part of the country where I was, with a view to return to America.

twice a-day. At the ſame time an ounce of gum arabic, and half an ounce of gum-tragacanth, may be diſſolved in an Engliſh pint of barley-water over a ſlow fire, and a table ſpoonful of it taken every hour.

If theſe have not the deſired effect, the patient may take, four times a-day, about the bulk of a nutmeg of the *Japonic confection*, drinking after it a tea-cupful of the decoction of logwood *.

Perſons who have been cured of this diſeaſe are very liable to relapſe; to prevent which, great circumſpection with reſpect to diet is neceſſary. The patient muſt abſtain from all fermented liquors, except now and then a glaſs of good wine; but he muſt drink no kind malt liquor. He ſhould alſo abſtain from animal food, as fiſh and fleſh, and live principally on milk and vegetables.

Gentle exerciſe and wholeſome air are likewiſe of importance. The patient ſhould go to the country as ſoon as his ſtrength will permit, and ſhould take exerciſe daily on horſeback, or in a carriage. He may likewiſe uſe bitters infuſed in wine or brandy, and may drink twice a-day a gill of lime water mixed with an equal quantity of new milk.

When dyſenteries prevail, we would recommend a ſtrict attention to cleanlineſs, a ſpare uſe of animal food, and the free uſe of ſound ripe fruits, and other vegetables. The night-air is to be carefully avoided, and all communications with the ſick. Bad ſmells are likewiſe to be ſhunned, eſpecially thoſe which ariſe from putrid animal ſubſtances. The neceſſaries where the ſick go are carefully to be avoided.

When the firſt ſymptoms of the dyſentery appear, the patient immediately ought to take a vomit, to go to bed and drink plentifully of weak warm liquor, to promote a ſweat. This, with a doſe or two of rhubarb at the beginning, would often carry off the diſeaſe. In countries where dyſentries prevail, we would adviſe ſuch as are liable to them, to take either a vomit or a purge every ſpring or autumn, as a preventative.

* See Appendix, *Decoction of Logwood.*

There are ſundry other fluxes of the belly, as the LIENTERY and CŒLIAC PASSION, which, though leſs dangerous than the dyſentery, yet merit conſideration. Theſe diſeaſes generally proceed from a relaxed ſtate of the ſtomach and inteſtines, which is ſometimes ſo great, that the food paſſes through them with ſcarcely any ſenſible alteration; and the patient dies merely from the want of nouriſhment.

When the lientery or cœliac paſſion ſucceeds to a dyſentery, the caſe is bad. They are always dangerous in old age, eſpecially when the conſtitution has been broken by exceſs or acute diſeaſes. If the ſtools be very frequent and quite crude, the thirſt great, with little urine, the mouth ulcerated, and the face marked with ſpots of different colours, the danger is very great.

The treatment of the patient is in general the ſame as in the dyſentery. In all obſtinate fluxes of the belly, the cure muſt be attempted, by firſt cleanſing the ſtomach and bowels with gentle vomits and purges; afterwards ſuch a diet as has a tendency to heat and ſtrengthen the bowels, with opiates and aſtringent medicines, will generally complete the cure.

The ſame obſervation holds with reſpect to a TENESMUS, or frequent deſire of going to ſtool. This diſeaſe reſembles the dyſentery ſo much, both in its ſymptoms and method of cure, that we think it needleſs to inſiſt upon it.

CHAP. XXXIV.

OF THE HEAD-ACH.

ACHES and pains proceed from very different cauſes, and may affect any part of the body; but we ſhall point out thoſe only which occur moſt frequently, and are attended with the greateſt danger.

When the head-ach is ſlight, and affects a particular part of the head only, it is called *cephalalgia*; when the whole head is affected, *cephalæa*; and when one ſide only, *hemicrania*. A fixed pain in the forehead, which

may be covered with the end of the thumb, is called the *clavis hyſtericus*.

There are alſo other diſtinctions. Sometimes the pain is internal, ſometimes external; ſometimes it is an original diſeaſe, and at other times only ſymptomatic. When the head-ach proceeds from a hot bilious habit, the pain is very acute and throbbing, with a conſiderable heat of the part affected. When from a cold phlegmatic habit, the patient complains of a dull heavy pain, and has a ſenſe of coldneſs in the part. This kind of head-ach is ſometimes attended with a degree of ſtupidity or folly.

Whatever obſtructs the free circulation of the blood through the veſſels of the head, may occaſion a head-ach. In perſons of full habit, who abound with blood, or other humours, the head-ach often proceeds from the ſuppreſſion of cuſtomary evacuations; as bleeding at the noſe, ſweating of the feet, &c. It may likewiſe proceed from any cauſe that determines a great flux of blood towards the head; as coldneſs of the extremities, or hanging down the head for a long time. Whatever prevents the return of the blood from the head, will likewiſe occaſion a head-ach; as looking long obliquely at any object, wearing any thing tight about the neck, or the like.

When a head-ach proceeds from the ſtoppage of a running at the noſe, there is a heavy, obtuſe, preſſing pain in the fore-part of the head, in which there ſeems to be ſuch a weight, that the patient can ſcarcely hold it up. When it is occaſioned by the cauſtic matter of the venereal diſeaſe, it generally affects the skull, and often produces a *caries* of the bones.

Sometimes the head-ach proceeds from the repulſion or retroceſſion of the gout, the eryſipelas, the ſmall-pox, meaſles, itch, or other eruptive diſeaſes. What is called a *hemicrania* generally proceeds from crudities or indigeſtion. Inanition, or emptineſs, will alſo occaſion head-ach. I have often ſeen inſtances of this in nurſes who gave ſuck too long, or who did not take a ſufficient quantity of ſolid food.

There is likewiſe a moſt violent, fixed, conſtant, and

almoſt intolerable head ach, which occaſions great debility both of body and mind, prevents ſleep, deſtroys the appetite, cauſes a vertigo, dimneſs of ſight, a noiſe in the ears, convulſions, epileptic fits, and ſometimes vomiting, coſtiveneſs, coldneſs of the extremities, &c.

The head ach is often ſymptomatic in continual and intermitting fevers, eſpecially quartans. It is likewiſe a very common ſymptom in hyſteric and hypochondriac complaints.

When a head ach attends an acute fever, with pale urine, it is an unfavourable ſymptom. In exceſſive head achs, coldneſs of the extremities is a bad ſign.

When the diſeaſe continues long, and is very violent, it often terminates in blindneſs, an apoplexy, deafneſs, a vertigo, the palſy, or the epilepſy.

In this diſeaſe the cold regimen in general is to be obſerved. The diet ought to conſiſt of ſuch emollient ſubſtances, as will correct the acrimony of the humours and keep the body open; as apples boiled in milk, ſpinage, turnips, and ſuch like. The drink ought to be diluting; as barley broth, infuſions of mild mucilaginous vegetables, decoctions of the ſudorific woods, &c. The feet and legs ought to be kept warm, and frequently bathed in lukewarm water; the head ſhould be ſhaved, and bathed with water and vinegar. The patient ought, as much as poſſible, to keep in an erect poſture, and not to lie with his head too low.

When the head ach is owing to exceſs of blood, or an hot bilious conſtitution, bleeding is neceſſary. The patient may be bled in the jugular vein, and the operation repeated if there be occaſion. Cupping alſo, or the application of leeches to the temples, and behind the ears, or to any part of the head that is moſt affected. In ſome caſes it will be proper to bliſter the whole head. In perſons of a groſs habit, iſſues or perpetual bliſters will be of ſervice. The body ought likewiſe to be kept open by gentle laxatives.

But when the head ach proceeds from a copious vi-

tiated ſerum ſtagnating in the membranes, either within or without the skull, with a dull, heavy, continual pain, which will neither yield to bleeding nor gentle laxatives, then more powerful purgatives are neceſſary, as pills made of aloes, reſin of jalap, or the like. It will alſo be neceſſary in this caſe to bliſter the whole head, and to keep the back part of the neck open for a conſiderable time by a perpetual bliſter.

When the head ach is occaſioned by the ſtoppage of a running at the noſe, the patient muſt frequently ſmell to a bottle of volatile ſalts; he may likewiſe take ſnuff, or any thing that will irritate the noſe, ſo as to promote a diſcharge from it; as the herb maſtich, ground ivy, &c.

A hemicrania, eſpecially a periodical one, is generally owing to a foulneſs in the ſtomach, for which gentle vomits muſt be adminiſtered, as alſo the purges of rhubarb;—after the bowels have been ſufficiently cleared, chalybeate waters, and ſuch bitters as ſtrengthen the ſtomach, will be neceſſary.

When the head ach ariſes from a vitiated ſtate of the humours, as in the ſcurvy and venereal diſeaſe, the patient, after proper evacuations, muſt drink freely of the decoction of woods, or the decoction of ſarſaparilla, with raiſins and liquorice *. Theſe, if duly perſiſted in, will produce very happy effects. When a collection of matter is felt under the skin, it muſt be diſcharged by an inciſion, otherwiſe it will render the bone carious.

When the head ach is ſo intolerable as to endanger the patient's life, or is attended with continual watching and delirium, recourſe muſt be had to opiates. Theſe, after proper evacuations by clyſters, or mild purgatives, may be applied both externally and internally. The affected part may be rubbed with Bate's anodyne balſam, or a cloth dipped in it may be applied to the part. The patient may at the ſame time take twenty drops of laudanum, in a cup of valerian or penny royal tea, twice or thrice a day. This is only to be

* See Appendix, *Decoction of Sarsaparilla.*

done in caſe of extreme pain. Proper evacuations ought always to accompany and follow the uſe of opiates †.

When the patient cannot bear the loſs of blood, his feet ought frequently to be bathed in lukewarm water, and well rubbed with a coarſe cloth. Cataplaſms with muſtard or horſe radiſh ought likewiſe to be applied to them. This courſe is peculiarly neceſſary when the pain proceeds from a gouty humour affecting the head.

When the head ach is occaſioned by great heat, hard labour, or violent exerciſe of any kind, it may be allayed by cooling medicines; as the ſaline draughts, with nitre, and the like.

A little of Ward's eſſence, dropped into the palm of the hand, and applied to the forehead, will ſometimes remove a violent head ach; æther will alſo have the ſame effect.

OF THE TOOTH-ACH.

This diſeaſe is ſo well known, that it needs no deſcription. It has great affinity with the rheumatiſm, and often ſucceeds pains of the ſhoulders and other parts of the body.

It may proceed from obſtructed perſpiration, or any of the other cauſes of inflammation. I have often known the tooth ach occaſioned by neglecting ſome part of the uſual covering of the head, by ſitting with the head bare near an open window, or expoſing it to a draught of cold air. Food or drink taken either too hot or too cold, is very hurtful to the teeth. Great quantities of ſugar, or other ſweet meats, are likewiſe hurtful. Nothing is more deſtructive to the teeth than cracking nuts, or chewing any kinds of hard ſubſtances. Picking the teeth with pins, needles, or any thing that may hurt the enamel with which they are

† When the pain is very violent, and does not yield to ſmall doſes of laudanum, the quantity may be increaſed. I have known a patient in extreme pain take three hundred drops in twenty four hours; but ſuch doſes ought only to be adminiſtered by a perſon of ſkill.

covered, does great miſchief, as the tooth is ſure to be ſpoiled whenever the air gets to it. Breeding women are very ſubject to the tooth ach, eſpecially during the firſt three or four months of pregnancy. The tooth ach often proceeds from ſcorbutic humours affecting the gums. In this caſe the teeth are ſometimes waſted, and fall out without any conſiderable degree of pain. The more immediate cauſe of the tooth ach is a rotten or carious tooth.

In order to relieve the tooth ach, we muſt firſt endeavour to leſſen the flux of humours on the part affected. This may be done by mild purgatives, ſcarifying the gums, or applying leeches to them, and bathing the feet frequently with warm water. The perſpiration ought likewiſe to be promoted by drinking freely of weak wine whey, or other diluting liquors, with ſmall doſes of nitre. Vomits too have often an exceeding good effect in the tooth ach. It is ſeldom ſafe to adminiſter opiates, or any kind of heating medicines, or even to draw a tooth, till proper evacuations have been premiſed; and theſe alone will often effect the cure.

If this fail, and the pain and inflammation ſtill increaſe, a ſuppuration may be expected, to promote which a toaſted fig ſhould be held between the gum and the cheek; bags filled with mild camomile flowers, flowers of elder, and the like, may be applied near the part affected, with as great a degree of warmth as the patient can bear, and renewed as they grow cold; the patient may likewiſe receive the ſteams of warm water into his mouth through an inverted funnel, or by holding his head over the mouth of a porringer filled with warm water. Gargles made of rob of elder, infuſed in ſmall beer, may be given to promote a diſcharge.

Such things as promote the diſcharge of ſaliva, or cauſe the patient to ſpit, are generally of ſervice. For this purpoſe bitter, hot, or pungent vegetables may be chewed; as gentian, calamus aromaticus, or pellitory of Spain. Allen recommends the root of yellow water flower de luce in this caſe. This root may either be

rubbed upon the teeth, or a little of it chewed. Brookes ſays, he hardly ever knew it fail to eaſe the tooth ach. It ought, however, to be uſed with caution.

Many other herbs, roots and ſeeds, are recommended for curing the tooth ach; as the leaves or roots of millefoil or yarrow chewed, tobacco ſmoked or chewed, ſtaves acre, or the ſeeds of muſtard chewed, &c. Theſe bitter, hot, and pungent things by occaſioning a greater flow of ſaliva, frequently give eaſe in the tooth ach.

Opiates often relieve the tooth ach. For this purpoſe, a little cotton wet with laudanum may be held between the teeth; or a piece of ſticking plaſter, about the bigneſs of a ſhilling, with a bit of opium in the middle of it, of a ſize not to prevent the ſticking of the other, may be laid on the temporal artery, where the pulſation is moſt ſenſible. De la Motte affirms, that there are few caſes wherein this will not give relief. If there be a hollow tooth, a ſmall pill made of equal parts of camphire and opium, put into the hollow, is often beneficial. When this cannot be had, the hollow tooth may be filled with gum maſtich, wax, lead, cork, or any ſubſtance that will ſtick in it, and keep out the external air.

Few applications give more relief in the tooth ach than bliſtering plaſters. Theſe may be applied between the ſhoulders; but they have the beſt effect when put behind the ears, and made ſo large as to cover a great part of the lower jaw. The application of hot iron to the nerve has often given relief; but this ſhould be done with great caution.

After all, when a tooth is carious, it is often impoſſible to remove the pain without extracting it; and as a ſpoiled tooth never becomes ſound again it is prudent to draw it ſoon, leſt it ſhould affect the reſt. Tooth drawing, like bleeding, is very much practiced by mechanics, as well as perſons of the medical profeſſion. The operation, however, is not without danger, and ought always to be performed with care. A perſon unacquainted with the ſtructure of the parts, will be in danger

of hurting the jaw bone, or of drawing a ſound tooth inſtead of a rotten one *.

When the tooth ach returns preriodically, and the pain chiefly affects the gums, it may be cured by the bark.

Some pretend to have found great benefit in the tooth ach, from the application of an artificial magnet to the affected tooth. We ſhall not attempt to account for its mode of operation; but if it be found to anſwer, though only in particular caſes, it certainly deſerves a trial, as it is attended with no expence, and cannot do any harm. Electricity has likewiſe been recommended, and particular inſtruments have been invented for ſending a ſhock through the affected tooth.

Perſons who have returns of the tooth ach at certain ſeaſons, as ſpring and autumn, might often prevent it by taking a purge at theſe times.

Keeping the teeth clean has no doubt a tendency to prevent the tooth ach. The beſt method of doing this is to waſh them daily with ſalt and water, a decoction of the bark, or with cold water alone. All bruſhing and ſcraping of the teeth is dangerous, and unleſs it be performed with great care, does miſchief.

OF THE EAR-ACH.

This diſorder chiefly affects the membrance which lines the inner cavity of the ear, called the meatus auditorius. It is often ſo violent as to occaſion great reſtleſsneſs, anxiety and even delirium. Sometimes epileptic fits, and other convulſive diſorders, have been brought on by extreme pain in the ear.

The ear ach may proceed from any of the cauſes which produce inflammation. It often proceeds from a ſudden ſuppreſſion of perſpiration, or from the head being expoſed to cold when covered with ſweat. It may alſo be occaſioned by worms, or other inſects getting into the

* This may always be prevented by the operator striking upon the teeth with any piece of metal, as this never fails to excite the pain in the carious tooth.

r, or being bred there; or from any hard body ſtick-
g in the ear. Sometimes it proceeds from the tranſ-
tion of morbific matter to the ear. This often happens
the decline of malignant fevers and occaſions deaf-
ſs, which is generally reckoned a favourable ſymp-
m.

When the ear ach proceeds from inſects, or any hard
dy ſticking in the ear, every method muſt be taken
remove them as ſoon as poſſible. The membranes
ay be relaxed by dropping into the ear oil of ſweet
monds, or olive oil. Afterwards the patient ſhould be
ade to ſneeze by taking ſnuff, or ſome ſtrong ſternu-
tory. If this ſhould not force out the body, it muſt
e extracted by art. I have ſeen inſects, which had
ot into the ear, come out of their own accord by
ouring in oil.

When the pain of the ear proceeds from inflamma-
on, it muſt be treated like other topical inflamma-
ions, by a cooling regimen and opening medicines.
leeding at the beginning, either in the arm or jugular
ein, or cupping in the neck, will be proper. The ear
ay likewiſe be fomented with ſteams of warm water;
r flannel bags filled with boiled mallows and camomile
owers may be applied to it warm, or bladders filled
ith warm milk and water. An exceeding good me-
nod of fomenting the ear is to apply it cloſe to the
outh of a jug filled with warm water, or a ſtrong
ecoction of camomile flowers.

The patient's feet ſhould be frequently bathed in
ukewarm water, and he ought to take ſmall doſes of
nitre and rhubarb, viz. a ſcruple of the former, and ten
grains of the latter three times a day. His drink may
e whey, or decoction of barley and liquorice, with
igs or raiſins. The parts behind the ears ought fre-
uently to be rubbed with camphorated oil, or a little
f the volatile liniment. The application of bliſters at
he back part of the ear frequently gives relief.

When the inflammation cannot be diſcuſſed, a poul-
ice of bread and milk, or roaſted onions, may be ap-
lied to the ear, and frequently renewed, till the ab-
ceſs breaks or can be opened. Afterwards the humours

may be diverted from the part by gentle laxatives, bliſters, or iſſues; but the diſcharge muſt not be ſuddenly dried up by any external application.

PAIN OF THE STOMACH, &c.

This may proceed from various cauſes, as indigeſtion; wind; the acrimony of the bile; ſharp, acrid, or poiſonous ſubſtances taken into the ſtomach, &c. It may likewiſe be occaſioned by worms; the ſtoppage of cuſtomary evacuations; or from a tranſlation of gouty matter to the ſtomach, the bowels, &c.

Women in the decline of life are very liable to pains of the ſtomach and bowels, eſpecially ſuch as are afflicted with hyſteric complaints. It is likewiſe very common to hypochondriac men of a ſedentary and luxurious life. In ſuch perſons it often proves ſo extremely obſtinate as to baffle all the powers of medicine.

When the pain of the ſtomach is moſt violent after eating, there is reaſon to ſuſpect that it proceeds from ſome fault either in the digeſtion or the food. In this caſe the patient ought to change his diet, till he finds what kind of food agrees beſt with his ſtomach, and ſhould continue chiefly to uſe it. If a change of diet does not remove the complaint, the patient may take a gentle vomit, and afterwards a doſe or two of rhubarb. He ought likewiſe to take an infuſion of camomile flowers, or ſome other ſtomachic bitter, either in wine or water. I have often known exerciſe remove this complaint, eſpecially ſailing, or a long journey on horſeback, or in a carriage.

When a pain of the ſtomach proceeds from flatulency, the patient is conſtantly belching up wind, and feels an uneaſy diſtention of the ſtomach after meals. This is a moſt deplorable diſeaſe, and is ſeldom thoroughly cured. In general, the patient ought to avoid all windy diet, and every thing that ſours on the ſtomach, as greens, roots, &c. This rule, however, admits of ſome exceptions. There are many inſtances of persons very much troubled with wind, who have received great benefit

from eating parched peaſe, though that grain is generally ſuppoſed to be of a windy nature †.

This complaint may likewiſe be greatly relieved by labour, eſpecially digging, reaping, mowing, or any kind of active employment by which the bowels are alternately compreſſed and dilated. The moſt obſtinate caſe of this kind I ever met with was in a perſon of a ſedentary occupation, whom I adviſed, after he had tried every kind of medicine in vain, to turn gardener; which he did, and has ever ſince enjoyed good health.

When a pain in the ſtomach is occaſioned by the ſwallowing of acrid or poiſonous ſubſtances, they muſt be diſcharged by vomit; this may be excited by butter, oils, or other ſoft things, which ſheath and defend the ſtomach from the acrimony of its contents.

When pain of the ſtomach proceeds from tranſlation of gouty matter, warm cordials are neceſſary, as generous wine, French brandy, &c. Some have drank a whole bottle of brandy or rum in this caſe in a few hours, without being in the leaſt intoxicated, or even feeling the ſtomach warmed by it. It is impoſſible to aſcertain the quantity neceſſary upon theſe occaſions. This muſt be left to the feelings and diſcretions of the patient. The ſafer way however is, not to go too far. When there is an inclination to vomit, it may be promoted by drinking an infuſion of camomile flowers, or *carduus benedictus*.

If a pain of the ſtomach proceeds from the ſtoppage of cuſtomary evacuations, bleeding will be neceſſary, eſpecially in ſanguine and very full habits. It will likewiſe be of uſe to keep the body gently open by mild purgatives; as rhubarb or ſenna. When this diſeaſe affects women in the decline of life, after the ſtoppage of the *menſes*, making an iſſue in the leg or arm will be of peculiar ſervice.

When the diſeaſe is occaſioned by worms, they muſt

† These are prepared by steeping or soaking pease in water, and afterwards drying them in a pot or kiln till they are hard. They may be used at pleasure.

be deſtroyed, or expelled by ſuch means as are recommended in the following ſection.

When the ſtomach is greatly relaxed, and the digeſtion bad, which often occaſion flatulencies, the elixir of vitroil will be of ſingular ſervice. Fifteen or twenty drops of it may be taken in a glaſs of wine or water twice or thrice a day.

Perſons afflicted with flatulency are generally unhappy unleſs they be taking ſome purgative medicines; theſe, though they may give immediate eaſe, tend to weaken and relax the ſtomach and bowels, and conſequently increaſe the diſorder. Their beſt method is to mix purgatives and ſtomachics together. Equal parts of Peruvian bark and rhubarb may be infuſed in brandy or wine, and taken in ſuch quantity as to keep the body gently open.

Although it is difficult to preſcribe a general medicine for a diſorder proceeding from ſuch a diverſity of cauſes; a plaſter may be recommended which will give relief in moſt caſes. Let it be made of any adheſive plaſter, with the addition of a drachm and a half or two drachms of powdered opium when warm, and ſpread on a piece of leather large enough to cover the whole ſtomach, where it ſhould be kept as long as it will ſtick.

CHAP. XXXV.

OF WORMS.

THESE are chiefly of three kinds, viz. the *tænia*, or tape-worm; the *teres*, or round and long worms; and the *aſcarides*, or round and ſhort worm. There are many other kinds of worms found in the human body; but as they proceed, in a great meaſure, from ſimilar cauſes, have nearly the ſame ſymptoms, and require almoſt the ſame method of treatment as theſe already mentioned, we ſhall not ſpend time in enumerating them.

The tape-worm is white, very long, and full of joints. It is generally bred either in the ſtomach or

ſmall inteſtines. The round and long worm is likewiſe bred in the ſmall gut, and ſometimes in the ſtomach. The round and ſhort worms commonly lodge in the *rectum*, or what is called the end gut, and occaſion a diſagreeable itching about the ſeat.

The long round worms occaſion ſqueamiſhneſs, vomiting, a diſagreeable breath, gripes, looſeneſs, ſwelling of the belly, ſwoonings, loathing of food, and at other times a voracious appetite, a dry cough, convulſions, epileptic fits and ſometimes a privation of ſpeech. Theſe worms have been known to perforate the inteſtines, and get into the cavity of the belly. The effects of the tape-worm are nearly the ſame with thoſe of the long and round; but rather more violent.

Andry ſays, the following ſymptoms particularly attend the *ſolium*, which is a ſpecies of the tape-worm, viz ſwoonings, privation of ſpeech, and a voracious appetite. The round worms called *aſcarides*, beſides an itching of the *anus*, cauſe ſwooning and teneſmus, or an inclination to go to ſtool.

CAUSES.——Worms may proceed from various cauſes; but they are ſeldom found except in weak and relaxed ſtomachs, where the digeſtion is bad. Sedentary perſons are more liable to them than active and laborious. Thoſe who eat great quantities of unripe fruit, or who live much on raw herbs and roots, are generally ſubject to worms. There ſeems to be an hereditary diſpoſition in ſome perſons to this diſeaſe. I have often ſeen all the children of a family ſubject to worms of a particular kind. They ſeem likewiſe frequently to be owing to the nurſe. Children of the ſame family nurſed by one woman have often worms, when thoſe nurſed by another have none.

SYMPTOMS. The common ſymptoms of worms are, paleneſs of the countenance, and, at other times, an univerſal fluſhing of the face; itching of the noſe; (this, however, is doubtful, as children pick their noſes in all diſeaſes;) ſtarting, and grinding of the teeth in ſleep; ſwelling of the upper lip; the appetite ſometimes bad, at other times quite voracious; looſeneſs; a ſour

or ſtinking breath; a hard ſwelled belly; great thirſt; the urine frothy, and ſometimes of a whitiſh colour; griping, or colic pains; an involuntary diſcharge of *ſaliva*, eſpecially when aſleep; frequent pains of the ſide, with a dry cough, and unequal pulſe; palpitations of the heart; ſwoonings; drowſineſs; cold ſweats; palſy: epileptic fits, with many other unaccountable nervous ſymptoms, which were formerly attributed to witchcraft, or the influence of evil ſpirits. Small bodies in the excrements reſembling melon or cucumber ſeeds, are ſymptoms of the tape-worm.

I lately ſaw ſome very ſurpriſing effects of worms in a girl about five years of age, who uſed to lie for whole hours as if dead. She at laſt expired, and, upon opening her body, a number of the *teres*, or long round worms, were found in her guts, which were conſiderably inflamed; and what anatomiſts call an *intus ſuſceptio*, or involving of one part of the gut within another, had taken place in no leſs than four different parts of the inteſtinal canal *.

MEDICINE.——Though numberleſs medicines are extolled for expelling and killing worms †, yet no diſeaſe more frequently baffles the phyſician's ſkill. In general, the moſt proper medicines for their expulſion are ſtrong purgatives; and to prevent their breeding, ſtomachic bitters, with now and then a glaſs of good wine.

The beſt purge for an adult is jalap and calomel. Five and twenty or thirty grains of the former with ſix or

* That worms exist in the human body there can be no doubt, and that they must sometimes be considered as a disease, is equally certain; but this is not the case so often as people imagine. The idea that worms occasion many diseases, gives an opportunity to the professed worm-doctors of imposing on the credulity of mankind, and doing much mischief. They find worms in every case, and liberally throw in their antidotes, which generally consist of strong drastic purges. I have known these given in delicate constitutions to the destruction of the patient, where there was not the least symptom of worms.

† A medical writer of the present age has enumerated upwards of fifty British plants, all celebrated for killing and expelling worms.

ſeven of the latter, mixed in ſyrup, may be taken early in the morning, for a doſe. It will be proper, that the patient keep the houſe all day and drink nothing cold. The doſe may be repeated once or twice a week, for a fortnight or three weeks. On the intermediate days the patient may take a drachm of the powder of tin, twice or thrice a-day, mixed with ſyrup, honey, or treacle.

Thoſe who do not chuſe to take calomel, may make uſe of the bitter purgatives; as aloes, hiera picra, tincture of ſenna and rhubarb, &c.

Oily medicines are ſometimes found beneficial for expelling worms. An ounce of ſalad oil and a table-ſpoonful of common ſalt may be taken in a glaſs of red port wine thrice a day, or oftener if the ſtomach will bear it. But the more common form of uſing oil is in clyſters. Oily clyſters, ſweetened with ſugar or honey, are very efficacious in bringing away the ſhort round worms called *aſcarides*, and likewiſe the *teres*.

The Harrowgate water is an excellent medicine for expelling worms, eſpecially the *aſcarides*. As this water is impregnated with ſulphur, we may hence infer, that ſulphur alone muſt be a good medicine in this caſe, which is found to be a fact. Many practitioners give flour of ſulphur in very large doſes, and with great ſucceſs. It ſhould be made into an electuary with honey or treacle, and taken in ſuch quantity as to purge the patient.

Where Harrowgate water cannot be obtained, ſea-water may be uſed, which is far from being a contemptible medicine in this caſe. If ſea-water cannot be had, common ſalt diſſolved in water may be drank. I have often ſeen this uſed by country nurſes with very good effect. Some flour of ſulphur may be taken over night, and the ſalt water in the morning.

But worms, though expelled, will ſoon breed again, if the ſtomach remain weak and relaxed; to prevent which, we would recommend the Peruvian bark. Half a drachm of bark in powder may be taken in a glaſs of red port wine three or four times a-day, after the above

medicines have been uſed. Lime-water is likewiſe good for this purpoſe, or a table-ſpoonful of the chalybeate wine taken twice or thrice a-day. Infuſions or decoctions of bitter herbs may likewiſe be drank; as the infuſion of tanſy, water trefoil, camomile-flowers, tops of wormwood, the leſſer centaury, &c.

The directions ſtated above are for adults; but the medicines for children muſt be more palatable, and the doſes leſs. For a child of four or five years old, ſix grains of rhubarb, five of jalap, and two of calomel, may be mixed in a ſpoonful of ſyrup or honey, and given in the morning. The child ſhould keep the houſe all day, and take nothing cold. This doſe may be repeated twice a-week for three or four weeks. On the intermediate days, the child may take a ſcruple of powdered tin, and ten grains of æthiops mineral, in a ſpoonful of treacle, twice a day. This doſe muſt be increaſed or diminiſhed according to the age of the patient.

Biſſet ſays, the great baſtard black hellebore, or *bear's foot*, is a moſt powerful vermifuge for the long round worms. He orders the decoction of about a drachm of the green leaves, or about fifteen grains of the dried leaves in powder, for a doſe to a child between four and ſeven years of age. This doſe is to be repeated two or three times. He adds, that the green leaves made into a ſyrup with coarſe ſugar, is almoſt the only medicine he has uſed for round worms for three years paſt. Before preſſing out the juice, he moiſtens the bruiſed leaves with vinegar, which corrects the medicine. The doſe is a tea-ſpoonful at bed-time, and one or two next morning.

I have frequently known thoſe big bellies, which in children are commonly reckoned a ſign of worms, quite removed by giving them white ſoap in their pottage, or other food. Tanſy, garlic, and rue, are all good againſt worms, and may be uſed various ways. We might here mention many other plants, both for external and internal uſe, as the cabbage bark, &c. but think the powder of tin with æthiops mineral, and the purges of rhubarb and calomel, are more to be depended on.

Ball's purging vermifuge powder is a very powerful

medicine. It is made of equal parts of rhubarb, ſcammony, and calomel, with as much double refined ſugar as is equal to the weight of all the other ingredients. Theſe muſt be well mixed together, and reduced to a fine powder. The doſe for a child is from ten grains to twenty, once or twice a week. An adult may take a drachm for a doſe *.

Parents who would preſerve their children from worms, ought to allow them plenty of exerciſe in the open air; to take care that their food be wholeſome and ſufficiently ſolid; and, as far as poſſible, to prevent their eating raw herbs, roots, or green traſhy fruits. It will not be amiſs to allow a child who is ſubject to worms, a glaſs of red wine after meals; as every thing that braces and ſtrengthens the ſtomach, is good both for preventing and expelling theſe vermin †.

In recommending *ſolid* food, it is by no means to be underſtood, that children ſhould be crammed twice or thrice a-day with meat, but that they ſhould not be fed with *ſlops*. Meat ſhould be given them only at dinner, and in a moderate quantity, for exceſs would promote inſtead of preventing worms. The meat ſhould always be accompanied with plenty of bread, and wholeſome, tender, and well boiled vegetables, which ſerve to keep the body gently open, without having recourſe to purgatives. *Ripe* fruits is alſo in this reſpect eminently beneficial.

When ſymptoms of worms appear, parents would do well to confine themſelves at firſt to a proper diet

* A powder for the tape-worm resembling this, was long kept a secret on the Continent; it was lately purchased by the French King, and will be found under the article *Powder*, in the Appendix.

† We think it necessary here to warn people of their danger who buy cakes, powders, and other worm medicines, at random from quacks, and give them to their children without proper care. The principal ingredients in most of these medicines is mercury, which is never to be trifled with. I lately saw a shocking instance of this conduct. A girl who had taken a dose of worm powder, bought of a travelling quack, went out, and perhaps was so imprudent as to drink cold water during its operation; she immediately swelled, and died on the following day, with all the symptoms of having been poisoned.

and regimen, and not apply to the apothecary till unequivocal proofs have aſcertained the complaint. The danger of quack medicines has been already exemplified.

CHAP. XXXVI.

OF THE JAUNDICE.

THIS diſeaſe is firſt obſervable in the white of the eye, which appears yellow. Afterwards the whole ſkin puts on a yellowiſh appearance. The urine too is of a ſaffron hue, and dyes a white cloth, of the ſame colour. There is likewiſe a ſpecies of this diſeaſe called the Black Jaundice.

CAUSES.——The immediate cauſe of the jaundice is an obſtruction of the bile. The remote or occaſional cauſes are, the bites of poiſonous animals, as the viper, mad dog, &c. the bilious or hyſteric colic; violent paſſions, as grief, anger, &c. Strong purges or vomits will likewiſe occaſion the jaundice. Sometimes it proceeds from obſtinate agues, or from that diſeaſe being prematurely ſtopped by aſtringent medicines. In infants, it is often occaſioned by the *meconium* not being ſufficiently purged off. Pregnant women are very ſubject to it. It is likewiſe a ſymptom in ſeveral kinds of fever. Catching cold, or the ſtoppage of cuſtomary evacuations, as the *menſes*, the bleeding piles, iſſues, &c. will occaſion the jaundice.

SYMPTOMS.——The patient at firſt complains of exceſſive wearineſs, and has great averſion to every kind of motion. His ſkin is dry, and he generally feels a kind of itching or pricking pain over the whole body. The ſtools are of a whitiſh or clay-colour, and the urine, as was obſerved above, is yellow. The breathing is difficult, and the patient complains of an unuſual load or oppreſſion of the breaſt. There is a heat in the noſtrils, a bitter taſte in the mouth, loathing of food, ſickneſs at

the ſtomach, vomiting, flatulency, and other ſymptoms of indigeſtion.

If the patient be young, and the diſeaſe complicated with no other malady, it is ſeldom dangerous; but in old people, where it continues long, returns frequently, and is complicated with the dropſy or hypochondriac ſymptoms, it generally proves fatal. The black jaundice is more dangerous than the yellow.

REGIMEN.——The diet ſhould be cool, light and diluting, conſiſting chiefly of ripe fruits and mild vegetables; as apples boiled or roaſted, ſtewed prunes, preſerved plums, boiled ſpinage, &c. Veal or chicken-broth, with light bread, are likewiſe very proper. Many have been cured by living almoſt wholly for ſome days on raw eggs. The drink ſhould be butter-milk, whey ſweetened with honey, or decoctions of cool opening vegetables; as marſh-mallow roots, with liquorice, &c.

The patient ſhould take as much exerciſe as he can bear, either on horſeback, or in a carriage; walking, running, and even jumping, are likewiſe proper, provided he can bear them without pain, and there be no ſymptoms of inflammation. Patients have been often cured of this diſeaſe by a long journey after medicines have proved ineffectual.

Amuſements are likewiſe of great uſe in the jaundice. The diſeaſe is often occaſioned by a ſedentary life, joined to a dull melancholy diſpoſition. Whatever therefore tends to promote the circulation, and to cheer the ſpirits, muſt have a good effect; as dancing, laughing, ſinging, &c.

MEDICINE.—If the patient be young, of a full, ſanguine habit, and complains of pain in the right ſide, about the region of the liver, bleeding will be neceſſary. After this, a vomit muſt be adminiſtered; and if the diſeaſe proves obſtinate, it may be repeated once or twice. No medicines are more beneficial in the jaundice than vomits, eſpecially where it is not attended with inflammation. Half a drachm of ipecacuanha in powder will be a ſufficient doſe for an adult. It may be wrought off

with weak camomile-tea, or luke-warm water. The body muſt likewiſe be kept open by taking a ſufficient quantity of Caſtile ſoap, or the pills for the jaundice recommended in the Appendix.

Fomenting the parts about the region of the ſtomach and liver, and rubbing them with a warm hand or fleſh-bruſh, are likewiſe beneficial; but it is ſtill more ſo for the patient to ſit in a bath of warm water up to the breaſt. He ought to do this frequently, and ſhould continue in it as long as his ſtrength will permit.

Many dirty things are recommended for the cure of the jaundice; as lice, millepedes, &c. But theſe do more harm than good, as people truſt to them, and neglect more valuable medicines; beſides, they are ſeldom taken in ſufficient quantity to produce any effects. People always expect that ſuch things ſhould act as charms, and conſequently ſeldom perſiſt in the uſe of them. Vomits, purges, fomentations, and exerciſe will ſeldom fail to cure the jaundice, when it is a ſimple diſeaſe; and when complicated with the dropſy, a ſcirrhus liver, or other chronic complaints, it is hardly to be cured by any means.

Numberleſs Britiſh herbs are extolled for the cure of this diſeaſe. The author of the Medicina Britannica mentions near a hundred, all famous for curing the jaundice. The fact is, the diſeaſe often goes off of its own accord; in which caſe the laſt medicine is always ſaid to have performed the cure. I have ſometimes, however, ſeen conſideroble benefit, in a very obſtinate jaundice, from a decoction of hemp ſeed. Four ounces of the ſeed may be boiled in two Engliſh quarts of ale, and ſweetened with coarſe ſugar. The doſe is half an Engliſh pint every morning. It may be continued for eight or nine days.

I have likewiſe known Harrowgate ſulphur water cure jaundice of very long ſtanding. It ſhould be uſed for ſome weeks, and the patient muſt both drink and bathe.

The ſoluble tartar is a very proper medicine in the jaundice. A drachm of it may be taken every night

and morning in a cup of tea or water-gruel. If it does not open the body, the dose may be increased.

Persons subject to the jaundice ought to take as much exercise as possible, and to avoid all heating and astringent aliments.

This cannot be too strongly inculcated. The disease arising most usually from an obstruction of the biliary ducts, nothing can be so efficacious as keeping the body open, and taking a great deal of exercise. Though some medicine, particularly the decoction of hemp seed, as before mentioned, may be of considareble service, yet exercise is the grand specific, which may be taken with safety and benefit in every stage of this disorder.

CHAP. XXXVII.

OF THE DROPSY.

THE dropsy is a preternatural swelling of the whole body, or some part of it, occasioned by a collection of watery humor. It is distinguished by different names, according to the part affected, as the anasarca, or a collection of water under the skin; the ascites, or a collection of water in the belly; the hydrops pectoris, or dropsy of the breast; the hydrocephalus, or dropsy of the brain, &c.

CAUSES.——The dropsy is often owing to an hereditary disposition. It may likewise proceed from drinking ardent spirits, or other strong liquors. It is true, almost to a proverb, that great drinkers die of a dropsy. The want of exercise is also a very common cause of the dropsy. Hence it is justly reckoned among the diseases of the sedentary. It often proceeds from excessive evacuations, as frequent and copious bleedings, strong purges often repeated, frequent salivation, &c. The sudden stoppage of customary or necessary evacuations, as the menses, the hæmorrhoids, fluxes of the belly, &c. may likewise cause a dropsy.

I have known the dropsy occasioned by drinking large quantities of cold, weak, watery liquor, when the body was heated by violent exercise. A low, damp or marshy situation is likewise a frequent cause of it. Hence it is a common disease in moist, flat, fenny countries. It may also be brought on by a long use of poor watery diet, or of viscous aliment that is hard of digestion. It is often the effect of other diseases, as the jaundice, a scirrhus of the liver, a violent ague of long continuance, diarrhœa or dysentery, an empyema, or a consumption of the lungs. In short, whatever obstructs the perspiration or prevents the blood from being duly prepared, may occasion a dropsy.

SYMPTOMS.——The anasarca generally begins with a swelling of the feet and ancles towards night, which for some time disappears in the morning. In the evening, the parts, if pressed with the finger, will pit. The swelling gradually ascends, and occupies the trunk of the body, the arms, and the head. Afterwards the breathing becomes difficult, the urine is in small quantity, and the thirst great; the body is bound, and the perspiration is greatly obstructed. To these succeed torpor, heaviness, a slow wasting fever, and a troublesome cough. This last is generally a fatal symptom, as it shews that the lungs are affected.

In an ascarites, besides the above symptoms, there is a swelling on the belly, and often a fluctuation, which may be perceived by striking the belly on the side, and lying the palm of the hand on the opposite. This may be distinguished from a tympany by the weight of the swelling, as well as by the fluctuation. When the anasarca and ascites are combined, the case is very dangerous. Even a simple ascites seldom admits of a radical cure. Almost all that can be done is to let off the water by tapping, which seldom affords more than a temporary relief.

When the disease comes suddenly on, and the patient is young and strong, there is reason to hope for a cure, especially if medicine be given early. But if the patient be old, has led an irregular or a sedentary life,

or if there be reaſon to ſuſpect that the liver, lungs, or any of the viſcera are unſound, there is a great reaſon to fear that the conſequences will prove fatal.

REGIMEN.——The patient muſt abſtain, as much as poſſible, from all drink, eſpecially weak and watery liquors, and muſt quench his thirſt with muſtard-whey, or acids, as juice of lemons, oranges, ſorrel, or ſuch like. His aliment ought to be dry, of a ſtimulating and diuretic quality, as toaſted bread, the fleſh of birds, or other wild animals roaſted; pungent and aromatic vegetables, as garlic, muſtard, onions, creſſes, horſe-raddiſh, rocambole, ſhalot, &c. He may alſo eat ſea-biſcuit dipped in wine or a little brandy. This is not only nouriſhing, but tends to quench thirſt. Some have been actually cured of a dropſy by a total abſtinence from all liquids, and living entirely upon ſuch things as are mentioned above. If the patient muſt have drink, the Spa-water, or Rheniſh wine, with diuretic medicines infuſed in it, are the beſt.

Exerciſe is of the greateſt importance in a dropſy. If the patient be able to walk, dig, or the like, he ought to continue theſe exerciſes as long as he can. If he be not able to walk or labour, he muſt ride on horſeback, or in a carriage, and the more violent the motion ſo much the better, provided he can bear it. His bed ought to be hard, and the air of his apartments warm and dry. If he lives in a damp country, he ought to be removed into a dry one, and, if poſſible, into a warmer climate. In a word, every method ſhould be taken to promote the perſpiration, and to brace the ſolids. For this purpoſe it will likewiſe be proper to rub the patient's body, two or three times a-day with a hard cloth, or the fleſh-bruſh; and he ought conſtantly to wear flannel next his ſkin.

MEDICINE.——If the patient be young, his conſtitution good, and the diſeaſe has come on ſuddenly, it may generally be removed by ſtrong vomits, briſk purges, and ſuch medicines as promote a diſcharge by ſweat and urine. For an adult, half a drachm of ipecacauanha in powder, and half an ounce of oxymel of ſquills,

will be a proper vomit. This may be repeated as often as is found neceſſary, three or four days intervening between the doſes. The patient muſt not drink much after taking the vomit, otherwiſe he deſtroys its effect. A cup or two of camomile-tea will be ſufficient to work it off.

Between each vomit, on one of the intermediate days, the patient may take the following purge: Jalap in powder half a drachm, cream of tartar two drachms, calomel, ſix grains. These may be made into a bolus with a little ſyrup of pale roſes, and taken early in the morning. The leſs the patient drinks after it the better. If he be much griped, he may now and then take a cup of chicken broth.

The patient may likewiſe take every night at bedtime the following bolus: To four or five grains of camphor, add one grain of opium, and as much ſyrup of orange-peel as is ſufficient to make them into a bolus. This will generally promote a gentle ſweat, which ſhould be encouraged by drinking now and then a ſmall cup of wine whey, with a tea-ſpoonful of the ſpirits of hartſhorn in it. A tea-cupful of the following diuretic infuſion may likewiſe be taken every four or five hours through the day: Take juniper-berries, muſtard ſeed, and horſe radiſh, of each half an ounce, aſhes of broom half a pound; infuſe them in a quart of Rheniſh wine or ſtrong ale for a few days, and afterwards ſtrain off the liquor. Such as cannot uſe this infuſion, may uſe the decoction of ſeneka root, which is both diuretic and ſudorific. I have known an obſtinate anaſarca cured by an infuſion of the aſhes of broom in wine.

The above courſe will often cure an accidental dropſy if the conſtitution be good; but when the diſeaſe proceeds from a bad habit, or an unſound ſtate of the viſcera, ſtrong purges and vomits are not to be ventured upon. In this caſe the ſafer courſe is to palliate the ſymptoms by the uſe of ſuch medicines as promote the ſecretions, and to ſupport the patient's ſtrength by warm and nouriſhing cordials.

The ſecretion of urine may be greatly promoted by

nitre. Brookes says he knew a young woman who was cured of a dropsy by taking a drachm of nitre every morning in a draught of ale, after she had been given over as incurable. The powder of squills is likewise a good diuretic. Six or eight grains of it, with a scruple of nitre, may be given twice a day in a glass of strong cinnamon-water. Ball says, a large spoonful of unbruised mustard-seed taken every night and morning, and drinking half an English pint of the decoction of the tops of green broom after it, has performed a cure after other powerful medicines had proved ineffectual.

I have sometimes seen good effects from cream of tartar in this disease. It promotes the discharges by stool and urine, and will at least palliate, if it does not perform a cure. The patient may begin by taking an ounce every second or third day, and may increase the quantity to two or even to three ounces, if the stomach will bear it. This quantity is not, however, to be taken at once, but divided into three or four doses.

To promote perspiration, the patient may use the decoction of seneka-root, as directed above; or he may take two table-spoonfuls of Minderus's spirit in a cup of wine-whey three or four times a-day. To promote a discharge of urine, the following infusion of the London hospitals will likewise be beneficial.

Take of zedoary-root two drachms: dried squills, rhubarb, and juniper-berries bruised, of each a drachm; cinnamon in powder, three drachms; salt of wormwood, a drachm and a half; infuse in an English pint and a half of old hock wine, and, when fit for use, filter the liquor. A wine glass of it may be taken three or four times a day.

In the anasarca it is usual to scarify the feet and legs. By this means the water is often discharged; but the operator must be cautious not to make the incisions too deep; they ought barely to pierce through the skin, and especial care must be taken, by spirituous fomentations and proper digestives, to prevent a gangrene.

In an ascites, when the disease does not evidently and speedily give way to purgative and diuretic medi-

cines, the water ought to be kept off by tapping. This is a very ſimple and ſafe operation, and would often ſucceed, if it were performed in due time; but if it be delayed till the humours are vitiated, or the bowels ſpoiled, by long ſoaking in water, it can hardly be expected that any permanent relief will be procured*.

After the evacuation of the water, the patient is to be put on a courſe of ſtrengthening medicines; as the Peruvian bark; the elixir of vitriol; warm aromatics, with a due proportion of rhubarb, infuſed in wine, and ſuch like. His diet ought to be dry and nouriſhing, ſuch as is recommended in the beginning of the Chapter; and he ſhould take as much exerciſe as he can bear without fatigue. He ſhould wear flannel, or rather fleecy hoſiery, next his ſkin, and make daily uſe of the fleſh-bruſh.

An incidental dropſy may certainly by proper treatment be cured; but when fairly ſeated in the ſyſtem, with a ſcirrhous liver, or a worn-out conſtitution, medicines may give a temporary relief, but can hardly be expected ever to operate a cure. Nitre is probably of all others the moſt efficacious remedy.

CHAP. XXXVIII.

OF THE GOUT.

THERE is no diſeaſe which ſhews the imperfection of medicine, or ſets the advantages of temperance and exerciſe in a ſtronger light, than the gout. Exceſs and idleneſs are the true ſources from whence it originally ſprung, and all who would avoid it muſt be active and temperate.

* The very name of an operation is dreadful to most people, and they wish to try every thing before they have recourse to it. This is the reason why tapping so seldom succeeds to our wish. I have had a patient who was regularly tapped once a month for several years, and who used to eat her dinner as well after the operation as if nothing had happened. She died at last rather worn out by age than by the disease.

Though idleness and intemperance are the principal causes of the gout, yet many other things may contribute to bring on the disorder in those who are not, and to induce a paroxysm in those who are subject to it; as too great an application to study; too free an use of acidulated liquors; night-watching; grief or uneasiness of mind; an obstruction or defect of any of the customary discharges, as the *menses*, sweating of the feet, perspiration, &c.

SYMPTOMS.—A fit of the gout is generally preceded by indigestion, drowsiness, belching of wind, a slight head-ach, sickness, and sometimes vomiting. The patient complains of weariness and dejection of spirits, and has often a pain in the limbs, with a sensation as if wind or cold water were passing down the thigh. The appetite is often remarkably keen a day or two before the fit, and there is a slight pain in passing urine, and often an involuntary shedding of tears. Sometimes these symptoms are much more violent, especially upon the near approach of the fit; and some observe, that as is the fever which ushers in the gout, so will the fit be; if the fever be short and sharp, the fit will be so likewise; if it be feeble, long and lingering, the fit will be such also. But this observation can only hold with respect to very regular fits of the gout.

The regular gout generally makes its attack in the spring or beginning of winter, in the following manner: About two or three in the morning, the patient is seized with a pain in his great toe, sometimes in the heel, and at other times in the ancle or calf of the leg. This pain is accompanied with a sensation as if cold water were poured upon the part, which is succeeded by a shivering, with some degree of fever. Afterwards the pain increases, and fixing among the small bones of the foot the patient feels all the different kinds of torture, as if the part were stretched, burnt, squeezed, gnawed, or torn in pieces. The part at length becomes so exquisitely sensible, that the patient cannot bear to have it touched, or even suffer any person to walk across the room.

The patient is generally in exquiſite torture for twenty-four hours, from the time of the coming on of the fit; he then becomes eaſier, the part begins to ſwell, appears red and is covered with a little moiſture. Towards morning he drops aſleep, and generally falls into a gentle breathing ſweat. This terminates the firſt paroxyſm, a number of which conſtitutes a fit of the gout; which is longer or ſhorter, according to the patient's age, ſtrength, the ſeaſon of the year, and the diſpoſition of the body to this diſeaſe.

The patient is always worse towards night, and eaſier in the morning. The paroxyſms, however, generally grow milder every day, till at length the diſeaſe is carried off by perſpiration, urine, and the other evacuations. In ſome patients this happens in a few days; in others, it requires weeks, and in ſome months, to finiſh the fit. Thoſe whom age and frequent fits of the gout have greatly debilitated, ſeldom get free from it before the approach of ſummer, and ſometimes not till it be pretty far advanced.

REGIMEN.—As there are no medicines yet known that will cure the gout, we ſhall confine our obſervations chiefly to regimen, both in and out of the fit.

In the fit, if the patient be young and ſtrong, his diet ought to be thin and cooling, and his drink of a diluting nature; but where the conſtitution is weak, and the patient has been accuſtomed to live high, this is not a proper time to retrench. In this caſe he muſt keep nearly to his uſual diet, and ſhould take frequently a cup of ſtrong negus, or a glaſs of generous wine. Wine-whey is a very proper drink in this caſe, as it promotes the perſpiration without greatly heating the patient. It will anſwer this purpoſe better if a tea ſpoonful of *ſal volatile oleoſum*, or ſpirits of hartshorn be put into a cup of it twice a-day. It will likewiſe be proper to give at bed time a tea-ſpoonful of the volatile tincture of *guaiacum*, in a large draught of warm wine whey. This will greatly promote perſpiration through the night.

As the moſt ſafe and efficacious method of diſcharging

the gouty matter is by perſpiration, this ought to be kept up by all means, eſpecially in the affected part. For this purpoſe the leg and foot ſhould be wrapt in ſoft flannel, fur, or wool. The laſt is moſt readily obtained, and ſeems to anſwer the purpoſe better than any thing elſe. The people of Lancaſhire look upon wool as a kind of ſpecific in the gout. They wrap a great quantity of it about the leg and foot affected and cover it with a ſkin of ſoft dreſſed leather. This they ſuffer to continue for eight or ten days, and ſometimes for a fortnight or three weeks, or longer, if the pain does not ceaſe. I never knew any external application anſwer ſo well in the gout. I have often ſeen it applied when the ſwelling and inflammation were very great, with violent pain, and have found all theſe ſymptoms relieved by it in a few days. The wool which they uſe is generally greaſed, and carded or combed. They chooſe the ſofteſt which can be had, and ſeldom or never remove it till the fit be entirely gone off.

The patient ought likewiſe to be kept quiet and eaſy during the fit. Every thing that affects the mind diſturbs the paroxyſm, and tends to throw the gout upon the nobler parts. All external application that repel the matter are to be avoided as death. They do not cure the diſeaſe, but remove it from a ſafer to a more dangerous part of the body, where it often proves fatal. A fit of the gout is to be conſidered as Nature's method of removing ſomething that might prove deſtructive to the body, and all that we can do with ſafety, is to promote her intentions, and to aſſiſt her in expelling the enemy in her own way. Evacuations by bleeding, ſtool, &c. are likewiſe to be uſed with caution, the do not remove the cauſe of the diſeaſe, and ſometimes by weakening the patient prolong the fit; but where the conſtitution is able to bear it, it will be of uſe to keep the body gently open by diet, or very mild laxative medicines.

Many things will indeed ſhorten a fit of the gout, and ſome will drive it off altogether: but nothing has yet been found which will do this with ſafety to the patient. In vain we eagerly graſp at any thing that promiſes im-

mediate eaſe, and even hazard life itſelf for a temporary relief. This is the true reaſon why ſo many infallible remedies have been propoſed for the gout, and why ſuch numbers have loſt their lives by the uſe of them. It would be as impudent to ſtop the ſmall-pox from riſing, and to drive them into the blood, as attempt to repel the gouty matter after it has been thrown upon the extremities. The latter is as much an effort of Nature to free herſelf from an offending cauſe as the former, and ought equally to be promoted.

When the pain, however, is very great, and the patient is reſtleſs, thirty or forty drops of laudanum may be taken at bed-time. This will eaſe the pain, procure reſt, promote perſpiration, and forward the criſis of the diſeaſe.

After the fit is over, the patient ought to take a gentle doſe or two of the bitter tincture of rhubarb, or ſome other warm ſtomachic purge. He ſhould alſo drink a weak infuſion of ſtomachic bitter in ſmall wine or ale, as the Peruvian bark, with cinnamon, Virginian ſnake-root, and orange-peel. The diet at this time ſhould be light, but nouriſhing, and gentle exerciſe ought to be taken on horſeback, or in a carriage.

Out of the fit, it is in the patients power to do many things towards preventing a return of the diſorder, or rendering the fit, if it ſhould return, leſs ſevere. This, however, is not to be attempted by medicine. I have frequently known the gout kept off for ſeveral years by the Peruvian bark and other aſtringent medicines; but in all the caſes where I had occaſion to see this tried, the perſons died ſuddenly, and to all appearance for want of a regular fit of the gout. One would be apt from hence, to conclude, that a fit of the gout, to ſome conſtitutions, in the decline of life, is rather ſalutary than hurtful.

Though it may be dangerous to ſtop a fit of the gout by medicine, yet if the conſtitution can be ſo changed by diet and exerciſe, as to leſſen or totally prevent its return, there certainly can be no danger in following ſuch a courſe. It is well known that the whole habit

may be ſo altered by a proper regimen, as quite to eradicate this diſeaſe; and thoſe only who have ſufficient reſolution to perſiſt in ſuch a courſe have reaſon to expect a cure.

The courſe which we would recommend for preventing the gout, is as follows: In the firſt place, *univerſal temperance*. In the next place, *ſufficient exerciſe* *. By this we do not mean ſauntering about in an indolent manner, but labour, ſweat, and toil. Theſe only can render the humours wholeſome, and keep them ſo. Going early to bed, and riſing betimes, are alſo of great importance. It is likewiſe proper to avoid night ſtudies and intenſe thought. All ſtrong liquors, eſpecially generous wines and ſour punch, are to be avoided.

We would likewiſe recommend ſome doſes of *magneſia alba* and rhubarb to be taken every ſpring and autumn; and afterwards a courſe of ſtomachic bitters, as tanſey or water trefoil tea, an infuſion of gentian and camomile flowers, or a decoction of burdock root, &c. Any of theſe, or an infuſion of any wholeſome bitter that is more agreeable to the patient, may be drank for two or three weeks in March and October twice a-day. An iſſue or perpetual bliſter has a great tendency to prevent the gout. If theſe were more generally uſed in the decline of life, they would not only prevent the gout, but alſo other chronic maladies. Such as can afford to go to Bath, will find great benefit from bathing and drinking the water. It both promotes digeſtion, and invigorates the habit.

Though there is little room for medicine during a regular fit of the gout, yet when it leaves the extremities, and falls on ſome of the internal parts, proper applications to recal and fix it become abſolutely neceſſary. When the gout affects the head, the pain of the joints ceaſes, and the ſwelling diſappears, while either

* Some make a ſecret of curing the gout by *muſcular exerciſe*. This ſecret, however, is as old as Celſus, who recommends that mode of cure; and whoever will ſubmit to it in the fulleſt extent, may expect to reap ſolid and permanent advantages.

head ach, drowſineſs, trembling, giddineſs, convulſions or delirium come on. When it ſeizes the lungs, great oppreſſion, with cough and difficulty of breathing, enſue. If it attacks the ſtomach, extreme ſickneſs, vomiting, anxiety, pain in the epigaſtric region, and total loſs of ſtrength, will ſucceed.

When the gout attacks the head or lungs, every method muſt be taken to fix it in the feet. They muſt be frequently bathed in warm water, and acid cataplaſms applied to the ſoles. Bliſter-plaſters ought likewſe to be applied to the ancles or calves of the legs. Bleeding in the feet or ancles is also neceſſary, and warm ſtomachic purges. The patient ought to keep in bed for the moſt part, if there be any ſigns of inflammation, and ſhould be very careful not to catch cold.

If it attack the ſtomach, with a ſenſe of cold, the moſt warm cordials are neceſſary; as ſtrong wine boiled up with cinnamon or other ſpices; cinnamon water; peppermint-water; and even brandy or rum. The patient ſhould keep his bed, and endeavour to promote a ſweat by drinking warm liquors; and if he ſhould be troubled with a nauſea or inclination to vomit, he may drink camomile tea, or any thing that will make him vomit freely.

When the gout attacks the kidneys, and imitates gravel pains, the patient ought to drink freely of a decoction of marſhmallows, and to have the parts fomented with warm water. An emollient clyſter ought likewiſe to be given, and afterwards an opiate. If the pain be very violent, twenty or thirty drops of laudanum may be taken in a cup of decoction.

Perſons who have had the gout ſhould be very attentive to any complaints that may happen them about the time when they have reaſon to expect a return of the fit. The gout imitates many other diſorders, and by being miſtaken for them, and treated improperly, is often diverted from its regular courſe, to the great danger of the patient's life.

Thoſe who never had the gout, but who, from their conſtitution or manner of living, have reaſon to expect

it, ought likewiſe to be very circumſpect with regard to its firſt approach. If the diſeaſe, by wrong conduct or improper medicines, be diverted from its proper courſe, the miſerable patient has a chance to be for ever after tormented with head-achs, coughs, pains of the ſtomach and inteſtines, and to fall at laſt a victim to its attack upon ſome of the more noble parts.

OF THE RHEUMATISM.

This diſeaſe has often a reſemblance to the gout. It generally attacks the joints with exquiſite pain, and is ſometimes attended with inflammation and ſwelling. It is moſt common in the ſpring, and towards the end of autumn. It is uſually diſtinguiſhed into acute and chronic; or the rheumatiſm with and without a fever.

CAUSES——The cauſes of the rheumatiſm are frequently the ſame as thoſe of an inflammatory fever, viz. an obſtructed perſpiration, the immoderate uſe of ſtrong liquors, and the like. Sudden changes of the weather, and all tranſitions from heat to cold, are very apt to occaſion rheumatiſm. The moſt extraordinary caſe of a rheumatiſm that I ever ſaw, where almoſt every joint of the body was diſtorted, was a man who uſed to work one part of the day by the fire, and the other part of it in the water. Very obſtinate rheumatiſms have likewiſe been brought on by perſons not accuſtomed to it, allowing their feet to continue long wet. The ſame effects are often produced by wet clothes, damp beds, ſitting or lying on the damp ground, travelling in the night, &c.

The rheumatiſm may likewiſe be occaſioned by exceſſive evacuations, or the ſtoppage of cuſtomary diſcharges. It is often the effect of chronic diſeaſes, which vitiate the humours; as the ſcurvy, the lues venerea, obſtinate autumnal agues, &c.

The rheumatiſm prevails in cold, damp, marſhy countries. It is moſt common among the poorer ſort of peaſants, who are ill clothed, live in low damp houſes, and eat coarſe and unwholſome food, which contains but little nouriſhment, and is not eaſily digeſted.

SYMPTOMS.—The *acute* rheumatiſm commonly begins with wearineſs, ſhivering, a quick pulſe, reſtleſſneſs, thirſt, and other ſymptoms of fever. Afterwards the patient complains of flying pains, which are increaſed by the leaſt motion. Theſe at length fix in the joints, which are often affected with ſwelling and inflammation. If blood be let in this diſeaſe, it has generally the ſame appearance as in the pleuriſy.

In this kind of rheumatiſm the treatment of the patient is nearly the ſame as in an acute or inflammatory fever. If he be young and ſtrong, bleeding is neceſſary, which may be repeated according to the exigencies of the caſe. The body ought likewiſe to be kept open by emollient clyſters, or cool opening liquors; as decoctions of tamarinds, cream of tartar whey, ſenna tea, and the like. The diet ſhould be light, and in ſmall quantity, conſiſting chiefly of roaſted apples, groat gruel, or weak chicken broth. After the feveriſh ſymptoms have abated, if the pain ſtill continue, the patient muſt keep his bed, and take ſuch things as promote perſpiration, as wine whey, with ſpiritus Mindereri, &c. He may likewiſe take, for a few nights, at bed time, in a cup of wine whey, a drachm of the cream of tartar, and half a drachm of gum guiaiacum in powder

Warm bathing, after proper evacuations, has often an exceeding good effect. The patient may either be put into a bath of warm water, or have cloths wrung out of it and applied to the parts affected. Great care muſt be taken that he do not catch cold after bathing.

The chronic rheumatiſm is ſeldom attended with any conſiderable degree of fever, and is generally confined to ſome particular part of the body, as the ſhoulders, the back or the loins. There is ſeldom any inflammation or ſwelling in this caſe. Perſons in the decline of life are moſt ſubject to the chronic rheumatiſm. In ſuch patients it often proves extremely obſtinate, and ſometimes incurable.

In this kind of rheumatiſm the regimen ſhould be nearly the ſame as in the acute. Cool and diluting diet,

conſiſting chiefly of vegetable ſubſtances, as ſtewed prunes, coddled apples, currants, or gooſe berries boiled in milk is moſt proper. Arbuthnot ſays, "If there be a ſpecific in aliment for the rheumatiſm, it is certainly whey;" and adds, "That he knew a perſon ſubject to this diſeaſe, who could never be cured by any other method but a diet of whey and bread." He likewiſe ſays, "That cream of tartar in water gruel, taken for ſeveral days, will eaſe rheumatic pains conſiderably." This I have often experienced, but found it always more efficacious when joined with gum guaiacum, as already directed. In this caſe the patient may take the doſe formerly mentioned twice a day, and likewiſe a tea ſpoonful of the volatile tincture of gum guaiacum at bed time in wine whey.

This courſe may be continued for a week, or longer if the caſe proves obſtinate, and the patient's ſtrength will permit. It ought then to be omitted for a few days, and repeated again; at the ſame time leeches or a bliſtering plaſter may be applied to the part affected. What I have generally found anſwer better than either of theſe, in obſtinate fixed rheumatic pains, is the warm plaſter *. I have likewiſe known a plaſter of Burgundy pitch worn for ſome time on the part affected give great relief in rheumatic pains. My ingenious friend Dr. Alexander of Edinburgh, ſays, he has frequently cured very obſtinate rheumatic pains by rubbing the parts affected with tincture of cantharides. When the common tincture did not ſucceed, he uſed it of a double or treble ſtrength. Cupping upon the part affected is likewiſe beneficial, and preferable to the application of leeches.

Though this diſeaſe may not ſeem to yield to medicines for ſome time, yet they ought ſtill to be perſiſted in. Perſons who are ſubject to frequent returns of the rheumatiſm will often find their account in uſing medicines whether they be immediately affected with the diſeaſe or not. The chronic rheumatiſm is ſimilar to the gout in this reſpect, that the moſt proper time for

* See Appendix, *Warm Plaſter.*

uſing medicines to extirpate it, is when the patient is moſt free from the diſorder.

To thoſe who can afford the expence I would recommend the warm baths of Buxton or Matlock in Derbyſhire. They have often to my knowledge cured very obſtinate rheumatiſms, and are always ſafe either in or out of the fit. When the rheumatiſm is complicated with ſcorbutic complaints, which is not ſeldom the caſe, the Harrowgate waters and thoſe of Moffat are proper. They ſhould both be drank and uſed as a warm bath.

There are ſeveral of our own domeſtic plants which may be uſed with advantage in the rheumatiſm. One of the beſt is the white muſtard; a table ſpoonful of the ſeed of this plant may be taken twice or thrice a day in a glaſs of water or ſmall wine. The water trefoil is likewiſe of great uſe in this complaint. It may be infuſed in wine or ale, or drank in form of tea. The ground ivy, camomile, and ſeveral other bitters, are alſo beneficial, and may be uſed in the ſame manner. No benefit however is to be expected from theſe, unleſs they be taken for a conſiderable time. Excellent medicines are often deſpiſed in this diſeaſe, becauſe they do not perform an immediate cure; whereas nothing would be more certain than their effect were they duly perſiſted in. Want of perſeverance in the uſe of medicine is one reaſon why chronic diſeaſes are ſo ſeldom cured.

Cold bathing, eſpecially in ſalt water, often cures the rheumatiſm. We would alſo recommend riding on horſeback and wearing flannel next the ſkin. Iſſues are likewiſe very proper, eſpecially in chronic caſes. If the pain affects the ſhoulders an iſſue may be made in the arm; but if it affects the loins, it ſhould be put into the leg or thigh.

Perſons afflicted with the ſcurvy are very ſubject to rheumatic complaints. The beſt medicines in this caſe are bitters and mild purgatives. Theſe may either be taken ſeparately or together, as the patient inclines. An ounce of Peruvian bark, and half an ounce of rhubarb in powder, may be infuſed in a bottle of wine; and one, two, or three glaſſes of it taken daily, as ſhall

be found neceſſary for keeping the body gently open. In caſes where the bark itſelf proves ſufficiently purgative, the rhubarb may be omitted.

Such as are ſubject to frequent attacks of the rheumatiſm, ought to make choice of a dry, warm, ſituation, to avoid the night air, wet clothes, and wet feet, as much as poſſible. Their clothing ſhould be warm, and they ſhould wear flannel next the skin, and make frequent uſe of the fleſh bruſh.

Fleecy hoſiery worn next the skin is not only the beſt article of dreſs for preventing the rheumatiſm, but in promoting its cure. Its uſe in marſhy countries, where the inhabitants are ſubject to ague and rheumatiſm, cannot be too ſtrongly recommended; and in ſuch ſituations it would be a moſt beneficial piece of charity for thoſe in better circumſtances to aſſiſt in ſupplying the poor with this cheap, ſimple, and efficacious preſervative.

CHAP. XXXIX.

OF THE SCURVY.

THIS diſeaſe prevails chiefly in cold northern countries, eſpecially in low damp ſituations, near large marſhes, or great quantities of ſtagnating water. Sedentary people, of a dull melancholy diſpoſition, are moſt ſubject to it. It proves often fatal to ſailors on long voyages, particularly in ſhips that are not properly ventilated, have many people on board, or where cleanlineſs is neglected.

It is not neceſſary to mention the different ſpecies into which this diſeaſe has been divided, as they differ from one another chiefly in degree. What is called the *land ſcurvy*, however, is ſeldom attended with thoſe highly putrid ſymptoms which appear in patients who have been long at ſea, and which we preſume are rather owing to confined air, want of exerciſe, and the

unwholeſome food eaten by ſailors on long voyages, than to any ſpecific difference in the diſeaſe.

CAUSES.—The ſcurvy is occaſioned by cold moiſt air; by the long uſe of ſalted or ſmoke dried proviſions, or any kind of food that is hard of digeſtion, and affords little nouriſhment. It may alſo proceed from the ſuppreſſion of cuſtomary evacuations; as the menſes, the hæmorrhoidal flux, &c. It is ſometimes owing to an hereditary taint, in which caſe a very ſmall cauſe will excite the latent diſorder. Grief, fear, and other depreſſing paſſions, have a great tendency both to excite and aggravate this diſeaſe. The ſame obſervation holds with regard to neglect of cleanlineſs, bad clothing, the want of proper exerciſe, confined air, unwholeſome food, or any diſeaſe which greatly weakens the body, or vitiates the humours.

SYMPTOMS.—This diſeaſe may be known by unuſual wearineſs, heavineſs, and difficulty of breathing, eſpecially after motion; rottenneſs of the gums, which are apt to bleed on the ſlighteſt touch; a ſtinking breath; frequent bleeding at the noſe; crackling of the joints; difficulty of walking; ſometimes a ſwelling and ſometimes a falling away at the legs, on which there are livid, yellow, or violet coloured ſpots; the face is generally of a pale or leaden colour. As the diſeaſe advances other ſymptoms come on, as rottenneſs of the teeth, hæmorrhages, or diſcharges of blood from different parts of the body, foul obſtinate ulcers, pains in various parts, eſpecially about the breaſt, dry ſcaly eruptions all over the body, &c.; at laſt a hectic or waſting fever comes on, and the miſerable patient is often carried off by a dyſentery, a diarrhœa, a dropſy, the palſy, fainting fits, or a mortification of ſome of the bowels.

CURE.—We know no way of curing this diſeaſe but by purſuing a plan directly oppoſite to that which brings it on. It proceeds from a vitiated ſtate of the humours, occaſioned by errors in diet, air, or exerciſe; and this cannot be removed but by a proper attention to theſe important articles.

If the patient has been obliged to breath a cold, damp, or confined air, he ſhould be removed as ſoon as poſſible to a dry, open, and moderately warm one. If there is reaſon to believe that the diſeaſe proceeds from a ſedentary life, or depreſſed paſſions, as grief, fear, &c. the patient muſt daily take as much exerciſe in the open air as he can bear, and his mind ſhould be diverted by cheerful company and other amuſements. Nothing has a greater tendency either to prevent or remove this diſeaſe, than conſtant cheerfulneſs and good humour. But this, alas! is ſeldom the lot of perſons afflicted with the ſcurvy; they are generally ſurly, peeviſh and moroſe.

When the ſcurvy has been brought on by a long uſe of ſalted proviſions, the proper medicine is a diet conſiſting chiefly of freſh vegetables, as oranges, apples, lemons, limes, tamarinds, water creſſes, ſcurvy graſs, brook lime, &c. The uſe of theſe, with milk, pot herbs, new bread, and freſh beer and cyder, will ſeldom fail to remove a ſcurvy of this kind, if taken before it be too far advanced; but to have this effect, they muſt be perſiſted in for a conſiderable time. When freſh vegetables cannot be obtained, picked or preſerved ones may be uſed; and where theſe are wanting, recourſe muſt be had to the chemical acids. All the patient's food and drink ſhould in this caſe be ſharpened with cream of tartar, elixir of vitriol, or the ſpirit of ſea ſalt.

Theſe things, however, will more certainly prevent than cure the ſcurvy, for which reaſon ſeafaring people, eſpecially on long voyages, ought to lay in plenty of them. Cabbages, onions, gooſeberries, and many other vegetables, may be kept a long time by pickling, preſerving, &c. and when theſe fail, the chymical acids recommended above, which will keep for any length of time, may be uſed. We have reaſon to believe, if ſhips were well ventilated, had got ſtore of fruits, greens, cyder, &c. laid in, and if proper regard were paid to cleanlineſs and warmth, that ſailors would be the moſt healthy people in the world, and would ſel-

dom ſuffer either from the ſcurvy or putrid fevers, which are ſo fatal to that uſeful ſet of men; but it is too much the temper of ſuch people to deſpiſe all precaution; they will not think of any calamity till it overtakes them, when it is too late to ward off the blow.

It muſt indeed be owned, that many of them have it not in their power to make the proviſion we are ſpeaking of; but in this caſe it is the duty of their employers to make it for them, and no man ought to engage in a long voyage without having theſe articles ſecured.

I have ſeen very extraordinary effects in the land ſcurvy from a milk diet. This preparation of Nature is a mixture of animal and vegetable properties, which of all others is the moſt fit for reſtoring a decayed conſtitution, and removing that particular acrimony of the humours, which ſeem to conſtitute the very eſſence of the ſcurvy, and many other diſeaſes. But people deſpiſe this wholeſome and nouriſhing food, becauſe it is cheap, and devour with greedineſs fleſh and fermented liquors, while milk is deemed only fit for their hogs.

The moſt proper drink in the ſcurvy is whey or butter milk. When theſe cannot be had, ſound cyder, perry, or ſpruce beer may be uſed. Wort has likewiſe been found to be a proper drink in the ſcurvy, and may be uſed at ſea, as malt will keep during the longeſt voyage. A decoction of the tops of the ſpruce fir is likewiſe proper. It may be drank in the quantity of an Engliſh pint twice a day. Tar water may be uſed for the ſame purpoſe, or decoctions of mild mucilaginous vegetables, as ſarſaparilla, marſhmallow roots, &c. Infuſions of the bitter plants, as ground ivy, the leſſer centaury, marſh trefoil, &c. are likewiſe beneficial. I have ſeen the peaſants in ſome parts of Britain expreſs the juice of the laſt mentioned plant, and drink it with good effect in thoſe foul ſcorbutic eruptions with which they are often troubled in the ſpring ſeaſon.

Harrowgate water is certainly an excellent medicine in the land ſcurvy. I have often ſeen patients who had been reduced to the moſt deplorable condition by this diſeaſe, greatly relieved by drinking the ſulphur

water, and bathing in it. The chalybeate water may alſo be uſed with advantage, eſpecially with a view to brace the ſtomach after drinking the ſulphur-water, which, though it ſharpens the appetite, never fails to weaken the powers of digeſtion.

A ſlight degree of ſcurvy may be carried off by frequently ſucking a little of the juice of a bitter orange or a lemon. When the diſeaſe affects the gums only, this practice, if continued for ſome time, will generally carry it off. We would, however, recommend the bitter orange as greatly preferable to lemon; it ſeems to be as good a medicine, and is not ſo hurtful to the ſtomach. Perhaps our own ſorrel may be little inferior to either of them.

All kinds of ſalad are good in the ſcurvy, and ought to be eaten very plentifully, as ſpinage, lettuce, parſley, celery, endive, radiſh, dandelion, &c. It is amazing to ſee how freſh vegetables in the ſpring cure the brute animals of any ſcab or foulneſs which is upon their ſkins. It is reaſonable to ſuppoſe that their effects would be as great upon the human ſpecies, were they uſed in proper quantity for a ſufficient length of time.

I have ſometimes ſeen good effects in ſcorbutic complaints of very long ſtanding, from the uſe of a decoction of the roots of water-dock. It is uſually made by boiling a pound of the freſh root in ſix Engliſh pints of water, till about one third of it be conſumed. The doſe is from half a pint to a whole pint of the decoction every day. But in all the caſes where I have ſeen it prove beneficial, it was made much ſtronger, and drank in larger quantities. The ſafeſt way, however, is for the patient to begin with ſmall doſes, and increaſe them both in ſtrength and quantity as he finds his ſtomach will bear it. It muſt be uſed for a conſiderable time. I have known ſome take it for many months, and have been told of others who had uſed it for ſeveral years, before they were ſenſible of any benefit, but who nevertheleſs were cured by it at length.

The leproſy, which was ſo common in this country long ago, ſeems to have been near a-kin to the ſcurvy.

Perhaps its appearing ſo ſeldom now, may be owing to the inhabitants of Britain eating more vegetable food than formerly, living more upon tea and other diluting diet, uſing leſs ſalted meat, being more cleanly, better lodged and clothed, &c.—For the cure of this diſeaſe we would recommend the ſame courſe of diet and medicine as in the ſcurvy.

OF THE SCROPHULA, OR KING'S EVIL.

This diſeaſe chiefly affects the glands, eſpecially thoſe of the neck. Children, and young perſons of a ſedentary life, are very ſubject to it. It is one of thoſe diſeaſes which may be removed by proper regimen, but ſeldom yields to medicine. The inhabitants of cold, damp, marſhy countries are moſt liable to the ſcrophula.

CAUSES.——This diſeaſe may proceed from an hereditary taint, ſcrophulous nurſe, &c. Children who have the misfortune to be born of ſickly parents, whoſe conſtitutions have been greatly injured by the pox, or other chronic diſeaſes, are apt to be affected by the ſcrophula. It may likewiſe proceed from ſuch diſeaſes as weaken the habit or vitiate the humours, as the ſmall-pox, meaſles, &c. External injuries, as blows, bruiſes, and the like, ſometimes produce ſcrophulous ulcers; and we have reaſon to believe, when this happens, that there has been a prediſpoſition in the habit to this diſeaſe. In ſhort, whatever tends to vitiate the humours or relax the ſolids, paves the way to the ſcrophula; as the want of proper exerciſe, too much heat or cold, confined air, unwholeſome food, bad water, the long uſe of poor, weak, watery aliments, the neglect of cleanlineſs, &c. Nothing tends more to induce this diſeaſe in children than allowing them to continue long wet*.

SYMPTOMS.——At firſt, ſmall knots appear under

* The ſcrophula, as well as the rickets, is found to prevail in large manufacturing towns, where people live groſs, and lead ſedentary lives.

the chin, or behind the ears, which gradually increaſe in number and ſize, till they form one large hard tumour. This often continues for a long time without breaking, and when it does break, it only diſcharges a thin *ſanies*, or watery humour. Other parts of the body are likewiſe liable to its attack, as the arm pits, groins, feet, hands, eyes, breaſts, &c. Nor are the internal parts exempt from it. It often affects the lungs, liver, or ſpleen; and I have frequently ſeen the glands of the meſentery greatly enlarged by it.

Thoſe obſtinate ulcers which break out upon the feet and hands with ſwelling, and little or no redneſs, are of the ſcrophulous kind. They ſeldom diſcharge good matter, and are exceedingly difficult to cure. The *white ſwellings* of the joints ſeem likewiſe to be of this kind. They are with difficulty brought to a ſuppuration, and when opened they only diſcharge a thin ichor. There is not a more general ſymptom of the ſcrophula than a ſwelling of the upper lip and noſe.

REGIMEN.—As this diſeaſe proceeds, in a great meaſure, from relaxation, the diet ought to be generous and nouriſhing, but at the ſame time light and of eaſy digeſtion; as well fermented bread made of ſound grain, the fleſh and broth of young animals, with now and then a glaſs of generous wine, or good ale. The air ought to be open, dry, and not too cold, and the patient ſhould take as much exerciſe as he can bear. This is of the utmoſt importance. Children who have ſufficient exerciſe are ſeldom troubled with the ſcrophula.

MEDICINE.—The vulgar are remarkably credulous with regard to the cure of the ſcrophula; many of them believing in the virtue of the royal touch, that of the ſeventh ſon, &c. The truth is, we know but little either of the nature or cure of this diſeaſe, and where reaſon or medicine fail, ſuperſtition always comes in their place. Hence it is, that in diſeaſes which are the moſt difficult to underſtand, we generally hear of the greateſt number of miraculous cures being performed. Here, however, the deception is eaſily accounted for.

The ſcrophula, at a certain period of life, often cures of itſelf; and if the patient happens to be touched about this time, the cure is imputed to the touch, and not to Nature, who is really the phyſician. In the ſame way, the inſignificant noſtrums of quacks and old women often gain applauſe when they deſerve none.

There is nothing more pernicious than the cuſtom of plying children in the ſcrophula with ſtrong purgative medicines. People imagine it proceeds from humours, which muſt be purged off, without conſidering that theſe purgatives increaſe the debility, and aggravate the diſeaſe. It has been found, that keeping the body gently open for ſome time, eſpecially with ſea water, has a good effect; but this ſhould only be given in groſs habits, and in ſuch quantity as to procure one, or at moſt two ſtools every day.

Bathing in the ſalt water has likewiſe a very good effect, eſpecially in the warm ſeaſon. I have often known a courſe of bathing in ſalt water, and drinking it in ſuch quantities as to keep the body gently open, cure a ſcrophula, after many other medicines had been tried in vain. When ſalt water cannot be obtained, the patient may be bathed in freſh water, and his body kept open by ſmall quantities of ſalt and water, or ſome other mild purgative.

Next to cold bathing and drinking the ſalt water, we would recommend the Peruvian bark. The cold bath may be uſed in ſummer, and the bark in winter. To an adult half a drachm of the bark in powder may be given in a glaſs of red wine four or five times a day. Children, and ſuch as cannot take it in ſubſtance, may uſe the decoction, made in the following manner—

Boil an ounce of Peruvian bark, and a drachm of Winter's bark, both groſsly powdered, in an Engliſh quart of water to a pint; towards the end, half an ounce of ſliced liquorice root and a handful of raiſins may be added, which will render the decoction leſs diſagreeable, and make it take up more of the bark. The liquor muſt be ſtrained, and two, three, or four table

ſpoonfuls, according to the age of the patient given three times a day; or the compound tincture of bark may be uſed in its ſtead.

The Moffat and Harrowgate waters, eſpecially the latter, are likewiſe very proper medicines in the ſcrophula. They ought not, however, to be drank in large quantities, but ſhould be taken ſo as to keep the body gently open, and muſt be uſed for a conſiderable time.

The hemlock may ſometimes be uſed with advantage in the ſcrophula. Some lay it down as a general rule, that the ſea water is moſt proper before there are any ſuppuration or ſymptom of tabes; the Peruvian bark when there are running ſores, and a degree of hectic fever; and the hemlock in old inveterate caſes, approaching to the ſchirrous or cancerous ſtate. Either the extract or the freſh juice of this plant may be uſed. The doſe may be ſmall at firſt, and increaſed gradually as far as the ſtomach is able to bear it.

External applications are of little uſe. Before the tumour breaks, nothing ought to be applied to it, unleſs a piece of flannel, or ſomething to keep it warm. After it breaks, the ſore may be dreſſed with ſome digeſtive ointment. What I have always found to anſwer beſt, was the yellow baſilicon mixed with about a ſixth or eighth part of its weight of red precipitate of mercury. The ſore may be dreſſed with this twice a-day, and if it be very fungous, and does not digeſt well, a larger proportion of the precipitate may be added.

Medicines which mitigate this diſeaſe, though they do not cure it, are not to be deſpiſed. If the patient can be kept alive by any means till he arrives at the age of puberty, he has a great chance to get well, but if he does not recover at this time, in all probability he never will.

There is no malady which parents are ſo apt to communicate to their offſpring as the ſcrophula, for which reaſon people ought to beware of marrying into families affected with this diſeaſe.

For the means of preventing the ſcrophula, we muſt refer the reader to the obſervations on Nurſing, at the beginning of the book.

To bring the whole subject of prevention of this disease into one view—

The principal preventive is to keep the children perfectly clean and dry. Impurities not only taint and relax the skin, but corrupt the humours, their noxious particles being absorbed through the pores. Children should be frequently washed at first with lukewarm water, as best suited to the delicacy and habit of the new born infant; but the warmth to be gradually diminished, till at length the child can bear water perfectly cold, which will be most salutary and beneficial. The cold bath braces and strengthens the system, and by counteracting relaxation, operates most successfully as a preventive of scrophula. The child should be washed all over every morning, and the lower part every night, and being wiped perfectly dry, to be wrapped in a warm blanket.

Loose and light clothing, at all times salutary, is particularly so where there is any appearance of scrophula in the child. The linen next the skin must be frequently changed, and the same dress never worn two days.

In like manner air and exercise are grand preventives. Children should sleep in lofty airy apartments, and in good weather be daily taken into the fields to taste the healthful exhalations of the earth, and the balmy fragrance of the plants. In cold and wet weather caution should be used, but even then the daily use of the cold bath will enable the child to withstand the impressions of a damp chilly atmosphere. Exercise is in every respect beneficial, and prevents obstructions, particularly of the glands, which form the earliest symptom of scrophula.

Where there is reason to suspect this disease from the appearance of the child, having a weak habit and thin skin, or being the offspring of a scrophulous parent or parents, care should be taken to provide a very healthy nurse. After the child is weaned, it should gradually be accustomed to light and digestible animal food, and get a portion of it every day at dinner; as milk and vegetables, though generally nutritious and wholesome,

are not sufficient to give a proper tone to the stomach and system. A thinness of blood, and relaxation of the fibres, are generally causes, and always attendants of the evil, which are best counteracted by strengthening articles of food and drink. Butter, and all fatty and oily substances, are particularly to be avoided, and in this and all other cases where weakness is a cause or attendant of this disorder, pastry of every description is most noxious; nor should a child of a scrophulous habit eat any preparation of flour, but wholesome well-baked plain bread.

OF THE ITCH.

Though this disease is commonly communicated by infection, yet it seldom prevails where due regard is paid to cleanliness, fresh air, and wholesome diet. It generally appears in form of small watery pustules, first about the wrists, or between the fingers; afterwards it affects the arms, legs, thighs, &c. These pustules, are attended with intolerable itching, especially when the patient is warm in bed, or sits by the fire. Sometimes, indeed, the skin is covered with large blotches or scabs, and at other times with a white scurf, or scaly eruption. This last is called the Dry Itch, and is the most difficult to cure.

The itch is seldom a dangerous disease, unless when it is rendered so by neglect or improper treatment. If it be suffered to continue too long, it may vitiate the whole mass of humours; and, if it be suddenly drove in, without proper evacuations, it may occasion fevers, inflammations of the viscera, or other internal disorders.

The best medicine yet known for the itch is sulphur, which ought to be used both externally and internally. The parts most affected may be rubbed by an ointment made of the flower of sulphur, two ounces; crude sal ammoniac, finely powdered, two drachms: hog's lard, or butter, four ounces. If a scruple or half a drachm of the essence of lemon be added, it will entirely take

away the disagreeable smell. About the bulk of a nutmeg of this may be rubbed upon the extremities at bedtime twice or thrice a-week. It is seldom necessary to rub the whole body; but when it is, it ought not to be done all at once, but by turns, as it is dangerous to stop too many pores at the same time.

Before the patient begins to use the ointment, he ought, if he be of a full habit, to bleed or take a purge or two. It will likewise be proper, during the use of it, to take every night and morning as much of the flower of brimstone and cream of tartar, in a little treacle or new milk, as will keep the body gently open. He should beware of catching cold, should wear more clothes than usual, and take every thing warm. The same clothes, the linen excepted, ought to be worn all the time of using the ointment; and such clothes as have been worn while the patient was under the disease, are not to be used again, unless they have been fumigated with brimstone, and throughly cleansed, otherways they will communicate the infection anew †.

I never knew brimstone, when used as directed above, fail to cure the itch; and have reason to believe, that, if duly persisted in, it never will fail; but if it be only used once or twice, and cleanliness neglected, it is no wonder if the disorder returns. The quantity of ointment mentioned above will generally be sufficient for the cure of one person; but, if any symptoms of the disease should appear again, the medicine should be repeated. It is both more safe and efficacious when persisted in for a considerable time, than when a large quantity is applied at once. As most people dislike the smell of suphur, they may use in its place the powder of white helebore root made up into an ointment, in the same manner, which will seldom fail to cure the itch.

† Sir John Pringle observes that, though this disease may seem trifling, there is no one in the army that is more difficult to cure, as the infection often lurks in clothes, &c. and breaks out a second, or even a third time. The same inconveniency occurs in private families, unless particular regard is paid to the changing or cleaning of their clothes, which last is by no means an easy operation.

People ought to be extremely cautious leſt they take other eruptions for the itch; as the ſtoppage of theſe may be attended with fatal conſequences. Many of the eruptive diſorders to which children are liable, have a near reſemblance, and I have often known infants killed by being rubbed by greaſy ointments, that make theſe eruptions ſtrike ſuddenly in, which nature had thrown out to preſerve the patient's life, or prevent ſome other malady.

Much miſchief is likewiſe done by the uſe of mercury in this diſeaſe. Some perſons are ſo fool-hardy as to waſh the parts affected with a ſtrong ſolution of the corroſive ſublimate. Others uſe the mercurial ointment, without taking the leaſt care either to avoid cold, keep the body open, or obſerve a proper regimen. The conſequences of ſuch conduct may be eaſily gueſſed. I have known even the mercurial girdles produce bad effects, and would adviſe every perſon as he values his health, to beware how he uses them. Mercury ought never to be uſed as a medicine without the greateſt care. Ignorant people look upon theſe girdles as a kind of charm, without conſidering that the mercury enters the body.

It is not to be told what miſchief is done by uſing mercurial ointment for curing the itch and killing vermin; yet it is unneceſſary for either; the former may be always more certainly cured by ſulphur, and the latter will never be found where due regard is paid to cleanlineſs.

Thoſe who would avoid this deteſtable diſeaſe, ought to beware of infected perſons, to uſe wholeſome food, and to ſtudy univerſal cleanlineſs *.

* The itch is now by cleanliness banished from every genteel family in Britain. It still, however, remains among the poorer sorts of peasants in Scotland, and among the manufacturers in England. These are not only sufficient to keep the seeds of the disease alive, but to spread the infection among others. It were to be wished that some more effectual method could be devised for extirpating it altogether Several country clergymen have told me, that by getting such as were infected cured, and strongly recommending an attention to cleanliness, they have banished the itch entirely out of their parishes.

CHAP. XL.

OF THE ASTHMA.

THE asthma is a disease of the lungs, which seldom admits of a cure. Persons in the decline of life are most liable to it. It is distinguished into the moist and dry, or humoural and nevous. The former is attended with expectoration or spitting; but in the latter the patient seldom spits, unless sometimes a little tough phlegm, by the mere force of coughing.

CAUSES.——The asthma is sometimes hereditary. It may likewise proceed from a bad formation of the breast, the fumes of the metals or minerals taken into the lungs, violent exercise, especially running; the obstruction of customary evacuations, as the menses, harmorrhoids, &c. the sudden retrocession of the gout, or striking in the eruption, as the small-pox, measles, &c. violent passions of the mind, as sudden fear or surprise. In a word, the disease may proceed from any cause that either impedes the circulation of the blood through the lungs, or prevents their being duly expanded by the air.

SYMPTOMS.——An asthma is known by a quick labourious breathing, which is generally performed with a kind of weezing noise. Sometimes the difficulty of breathing is so great, that the patient is obliged to keep in an erect posture, otherwise he is in danger of being suffocated. A fit or paroxysm of the asthma generally happens after a person has been exposed to cold easterly winds, or has been abroad in thick foggy weather, or has got wet, or continued long in a damp place under ground, or has taken some food which the stomach could not digest, as pastries, toasted cheese, or the like.

The paroxysm is commonly ushered in with listlessness, want of sleep, hoarseness, a cough, belching of wind, a sense of heaviness about the breast, and difficulty of breathing. To these succeed heat, fever, pain of the head, sickness and nausea, great oppression of the

breaſt, palpitation of the heart, a weak and ſometimes intermitting pulſe, and an involuntary flow of tears, bilious vomitings, &c. All the ſymptoms grow worſe towards night; the patient is eaſier when up than a-bed, and is very deſirous of cool air.

REGIMEN.——The food ought to be light and of eaſy digeſtion. Boiled meats are to be preferred to roaſted, and the fleſh of young animals to that of old. All windy food, and whatever is apt to ſwell in the ſtomach, is to be avoided. Light puddings, white broths, and ripe fruits baked, boiled, or roaſted, are proper. Strong liquors of all kinds, eſpecially malt-liquor, are hurtful. The patient ſhould eat a very light ſupper, or rather none at all, and ſhould never ſuffer himſelf to be long coſtive. His cloathing ſhould be warm, eſpecially in the winter ſeaſon. As all diſorders of the breaſt are much relieved by keeping the feet warm, and promoting the perſpiration, a flannel ſhirt or waiſtcoat, and thick ſhoes, will be of ſingular ſervice.

But nothing is of ſo great importance in the aſthma as pure and moderately warm air. Aſthmatic people can ſeldom bear either the cloſe heavy air of a large town, or the ſharp keen atmoſphere of a bleak hilly country: a medium, therefore, between theſe is to be choſen. The air near a large town is often better than at a diſtance, provided the patient be removed ſo far as not to be affected by the ſmoke. Some aſthmatic patients indeed breathe eaſier in town than in the country; but this is ſeldom the caſe, eſpecially in towns where much coal is burnt. Aſthmatic perſons who are obliged to be in town all day, ought at leaſt to ſleep out of it. Even this will often prove of great ſervice. Thoſe who can afford it ought to travel into a warmer climate. Many aſthmatic perſons who cannot live in Britain, enjoy very good health in the ſouth of France, Portugal, Spain or Italy.

Exerciſe is likewiſe of very great importance in the aſthma, as it promotes the digeſtion, and is of ſervice in the preparation of the blood. The blood of aſthmatic perſons is ſeldom duly prepared, owing to the pro-

per action of the lungs being impeded. For this reaſon ſuch people ought daily to take as much exerciſe, either on foot, horſeback, or in a carriage, as they can bear.

MEDICINE.——Almoſt all that can be done by medicine in this diſeaſe, is to relieve the patient when ſeized with a violent fit. This indeed requires the greateſt expedition, as the diſeaſe often proves ſuddenly fatal. In a paroxyſm or fit the body is generally bound; a purging clyſter, with a ſolution of aſafœtida, ought therefore to be adminiſtered, and if there be occaſion, it may be repeated two or three times. The patient's feet and legs ought to be immerſed in warm water, and afterwards rubbed with a warm hand, or dry cloth. Bleeding, unleſs extreme weakneſs or old age ſhould forbid it, is highly proper. If there be a violent ſpaſm about the breaſt or ſtomach, warm fomentations, or bladders filled with warm milk and water, may be applied to the part affected, and warm cataplaſmsto the ſoles of the feet. The patient muſt drink freely of diluting liquors, and may take a tea-ſpoonful of the tincture of caſtor and of ſaffron mixed together in a cup of valerian tea, twice or thrice a day. Sometimes a vomit has a very good effect, and ſnatches the patient, as it were, from the jaws of death. This, however, will be more ſafe after other evacuations have been premiſed. A very ſtrong infuſion of roaſted coffee is ſaid to give eaſe in an aſthmatic paroxyſm.

In the moiſt aſthma, ſuch things as promote expectoration or ſpitting, ought to be uſed; as the ſyrup of ſquills, gum ammoniac, and ſuch like. A common ſpoonful of the ſyrup or oxymel of ſquills, mixed with an equal quantity of cinnamon water, may be taken three or four times through the day, and four or five pills made of equal parts of aſafœtida and gum ammoniac at bed-time *.

* After copious evacuations, large doſes of æther have been found very efficacious in removing a fit of the aſthma. I have likewiſe known the following mixture produce very happy effects: To four or five ounces of the ſolution of milk of gum ammoniac add two ounces of ſimple cinnamon-water, the ſame quantity of balſamic ſyrup, and half an ounce of paregoric elixir. Of this two table-ſpoonfuls may be taken every three hours.

For the convulsive or nervous asthma, antispasmodics and bracers are the most proper medicines. The patient may take a tea spoonful of the paregoric elixir twice a day. The Peruvian bark is sometimes found to be of use in this case. It may be taken in substance, or infused in wine. In short, every thing that braces the nerves, or takes off spasm, may be of use in a nervous asthma. It is often relieved by the use of asses milk: I have likewise known cow's milk drank warm in the morning have a very good effect in this case.

In every species of asthma, setons and issues have a good effect; they may either be set in the back or side, and should never be allowed to dry up. We shall here, once for all, observe, that not only in the asthma, but in most chronic diseases, issues are extremely proper. They are both a safe and efficacious remedy; and though they do not always cure the disease, yet they will often prolong the patient's life.

Asthma, common as it is in Great Britain, is almost unknown in milder and more serene climates; hence a change of climate is always advisable, and though neither that nor medicine can scarce ever eradicate the disease, yet the change to a milder climate, with a proper attention to regimen, may enable an asthmatic person to live many years in tolerable health. In this, however, as in most other disorders, general rules cannot be laid down for every situation, but the patient's case and constitution must be particularly consulted.

CHAP. XLI.

OF THE APOPLEXY.

THE apoplexy is a sudden loss of sense and motion, wherein the patient is to all appearance dead; the heart and lungs, however, still continue to move. Though this disease proves often fatal, yet it may sometimes be removed by proper care. It chiefly attacks sedentary persons of a gross habit, who use a rich and

plentiful diet, and indulge in ſtrong liquors. People in the decline of life are moſt ſubject to the apoplexy. It prevails moſt in winter, eſpecially in rainy ſeaſons, and very low ſtates of the barometer.

CAUSES.——The immediate cauſe of an apoplexy is a compreſſion of the brain, occaſioned by an exceſs of blood, or a collection of watery humours. The former is called a *ſanguine*, and the latter a *ſerous* apoplexy. It may be occaſioned by any thing that increaſes the circulation towards the brain, or prevents the return of the blood from the head: as intenſe ſtudy; violent paſſions *; viewing objects for a long time obliquely; wearing any thing too tight about the neck; a rich and luxurious diet; ſuppreſſion of urine; ſuffering the body to cool ſuddenly after having been greatly heated; continuing long in a warm or cold bath; the exceſſive uſe of ſpiceries, or high ſeaſoned food; exceſs of venery; the ſudden ſtriking in of any eruption; ſuffering iſſues, ſetons, &c. ſuddenly to dry up, or the ſtoppage of any cuſtomary evacuation; a mercurial ſalivation puſhed too far, or ſuddenly checked by cold; wounds or bruiſes on the head; long expoſure to exceſſive cold; poiſonous exhalations, &c.

SYMPTOMS, and method of cure.——The uſual forerunners of an apoplexy are giddineſs, pain, and ſwimming of the head; loſs of memory; drowſineſs; noiſe in the ears; the night mare; a ſpontaneous flux of tears, and laborious reſpiration. When perſons of an apoplectic make obſerve theſe ſymptoms, they have reaſon to fear the approach of a fit, and ſhould endeavour to prevent it by bleeding, a ſlender diet, and opening medicines.

In the ſanguine apoplexy, if the patient does not die

* I knew a woman who in a violent fit of anger was ſeized with a ſanguine apoplexy. She at firſt complained of extreme pain, *as if daggers had been thrust through her head*, as ſhe expreſſed it. Afterwards ſhe became comatoſe, her pulſe ſunk very low, and was exceeding ſlow. By bleeding, blistering, and other evacuations, ſhe was kept alive for about a fortnight. When her head was opened, a large quantity of extravasated blood was found in the left ventricle of the brain.

ſuddenly, the countenance appears florid, the face is ſwelled or puffed up, and the blood veſſels, eſpecially about the neck and temples, are turgid; the pulſe beats ſtrong; the eyes are prominent and fixed, and the breathing is difficult, and performed with a ſnorting noiſe. The excrements and urine are often voided ſpontaneouſly, and the patient is ſometimes ſeized with vomiting.

In this ſpecies of apoplexy every method muſt be taken to leſſen the force of the circulation towards the head. The patient ſhould be kept perfectly eaſy, and cool. His head ſhould be raiſed pretty high, and his feet ſuffered to hang down. His clothes ought to be looſened, eſpecially about the neck, and freſh air admitted into his chamber. His garters ſhould be tied pretty tight, by which means the motion of the blood from the lower extremities will be retarded. As ſoon as the patient is placed in a proper poſture, he ſhould be bled freely on the neck or arm, and if there be occaſion, the operation may be repeated in two or three hours. A laxative clyſter, with plenty of ſweet oil, or freſh butter, and a ſpoonful or two of common ſalt in it, may be adminſtered every two hours, and bliſtering-plaſters applied between the ſhoulders, and to the calves of the legs.

As ſoon as the ſymptoms are a little abated, and the patient is able to ſwallow, he ought to drink freely of ſome diluting opening liquor; as a decoction of tamarinds and liquorice, cream-tartar whey, or common whey with cream of tartar diſſolved in it. Or he may take any cooling purge, as Glauber's ſalts, manna diſſolved in an infuſion of ſenna, or the like. All ſpirits, and other ſtrong liquors, are to be avoided. Even volatile ſalts held to the noſe do miſchief. Vomits, for the ſame reaſon, ought not to be given, or any thing that may increaſe the motion of the blood towards the head.

In the ſerous apoplexy, the ſymptoms are nearly the ſame, only the pulſe is not ſo ſtrong, the countenance is leſs florid, and the breathing leſs difficult. Bleeding is not ſo neceſſary here as in the former caſe. It may, however, generally be performed once with ſafety and advantage, but ſhould not be repeated. The

patient ſhould be placed in the ſame poſture as directed above, and ſhould have bliſtering plaſters applied, and receive opening clyſters in the ſame manner. Purges are here likewiſe neceſſary, and the patient may drink ſtrong balm tea. If he be inclined to ſweat, it ought to be promoted by drinking ſmall wine whey, or an infuſion of carduus benedictus. A plentiful ſweat kept up for a conſiderable time has often carried off a ſerous apoplexy.

When apoplectic ſymptoms proceed from opium, or other narcotic ſubſtance taken into the ſtomach, vomits are neceſſary. The patient is generally relieved as ſoon as he has diſcharged the poiſon in this way.

Perſons of an apoplectic make, or thoſe who have been attacked by it, ought to uſe a very ſpare and ſlender diet, avoiding all ſtrong liquors, ſpiceries, and high ſeaſoned food. They ought likewiſe to guard againſt all violent paſſions, and to avoid the extremes of heat and cold. The head ſhould be ſhaved, and daily waſhed with cold water. The feet ought to be kept warm, and never ſuffered to continue long wet. The body muſt be kept open either by food or medicine, and a little blood may be let every ſpring and fall. Exerciſe ſhould by no means be neglected, but it ought to be taken in moderation. Nothing has a more happy effect in preventing an apoplexy than perpetual iſſues or ſetons; great care, however, muſt be taken not to ſuffer them to dry up, without opening others in their ſtead. Apoplectic perſons ought never to go to reſt with a full ſtomach, or to lie with their heads low, or wear any thing too tight about their necks.

The above obſervations ſhould be particularly attended to. A full ſtomach impedes the circulation, which is naturally ſlower when aſleep than when awake. The head lying low, ſeems to invite ſtagnation, and tight ligatures round the neck can hardly fail to produce apoplexy, by preventing the return of the blood from the veſſels of the brain.

CHAP. XLII.

OF COSTIVENESS, AND OTHER AFFECTIONS OF THE STOMACH AND BOWELS.

WE do not here mean to treat of thoſe aſtrictions of the bowels which are the ſymptoms of diſeaſes, as of the colic, the iliac paſſion, &c. but only to take notice of that infrequency of ſtools which ſometimes happens, and which in ſome particular conſtitutions may occaſion diſeaſes.

Coſtiveneſs may proceed from drinking rough red wines, or other aſtringent liquors; too much exerciſe, eſpecially on horſeback. It may likewiſe proceed from a long uſe of cold inſipid food which does not ſufficiently ſtimulate the inteſtines. Sometimes it is owing to the bile not deſcending to the inteſtines, as in the jaundice; and at the other times it proceeds from diſeaſes of the inteſtines themſelves, as a palſy, ſpaſm, torpor, tumours, a cold dry ſtate of the inteſtines, &c.

Exceſſive coſtiveneſs is apt to occaſion pains of the head, vomiting, colics, and other complaints of the bowels. It is peculiarly hurtful to hypochondriac and hyſteric perſons, as it generates wind and other grievous ſymptoms. Some people, however, can bear coſtiveneſs to a great degree. I know perſons who enjoy pretty good health, yet do not go to ſtool above once a week, and others not above once a fortnight. Indeed I have heard of ſome who do not go above once a month.

Perſons who are generally coſtive ſhould live upon a moiſtening and laxative diet; as roaſted or boiled apples, pears, ſtewed prunes, raiſins, gruels with currants, butter, honey, ſugar, and ſuch like. Broths, with ſpinage, leeks, and other ſoft pot herbs, are likewiſe proper. Rye bread, or that which is made of a mixture of wheat and rye together, ought to be eaten. No perſon troubled

with coſtiveneſs ſhould eat white bread alone, eſpecially that which is made of fine flour. The beſt for keeping the body ſoluble is what in ſome parts of England they call *meſlin*. It is made of a mixture of wheat and rye, and is very agreeable to thoſe who are acuſtomed to it.

Coſtiveneſs is increaſed by keeping the body too warm, and by every thing that promotes the perſpiration; as wearing flannel, lying too long in bed, &c. Intenſe thought and a ſedentary life are likewiſe hurtful. All the ſecretions and excretions are promoted by moderate exerciſe without doors, and by a gay, cheerful, ſprightly temper of mind.

The drink ſhould be of an opening quality. All ardent ſpirits, auſtere and aſtringent wines, as port, claret, &c. ought to be avoided. Malt liquor that is fine, and of a moderate ſtrength, is very proper. Butter milk, whey, and other watery liquors, are likewiſe proper, and may be drank in turns, as the patient's inclination directs.

Thoſe who are troubled with coſtiveneſs, ought if poſſible, to remedy it by diet, as the conſtant uſe of medicine for that purpoſe is attended with many inconveniences, and often with bad conſequences*. I never

* The learned Dr. Arbuthnot advises those who are troubled with costiveness to use animal oils, as fresh butter, cream, marrow, fat broths, especially those made of the internal parts of animals, as the liver, heart, midriff, &c. He likewise recommends the expressed oils of mild vegetables, as olives, almonds, pastaches, and the fruits themselves; all oily and mild fruits, as figs; decoctions of mealy vegetables; these lubricate the intestines; some saponaceous substances which stimulate gently, as honey, hydromel, or boiled honey and water, unrefined sugar.

The doctor observes, that such lenitive substances are proper for persons of dry atrabilarian constitutions, who are subject to astriction of the belly, and the piles, and will operate when stronger medicinal substances are sometimes ineffectual; but that such lenitive diet hurts those whose bowels are weak and lax. He likewise observes, that all watery substances are lenitive, and that even common water, whey, sour milk, and butter milk have that effect.—That new milk, especially asses milk, stimulates still more when it sours on the stomach; and that whey turned sour will purge strongly;

knew any one get into a habit of taking medicine for keeping the body open, who could leave it off. In time the cuſtom becomes neceſſary, and generally ends in a total relaxation of the bowels, indigeſtion, loſs of appetite, waſting of the ſtrength, and death.

When the body cannot be kept open without medicine, we would recommend gentle doſes of rhubarb to be taken twice or thrice a week. This is not near ſo injurious to the ſtomach as aloes, jalap, or the other draſtic purgatives ſo much in uſe. Infuſions of ſenna and manna may likewiſe be taken, or half an ounce of ſoluble tartar diſſolved in water gruel. About the ſize of a nutmeg of lenitive electuary taken twice or thrice a-day generally anſwers the purpoſe very well.

WANT OF APPETITE.

This may proceed from a foul ſtomach, indigeſtion, the want of free air and exerciſe, grief, fear, anxiety, or any of the depreſſing paſſions; exceſſive heat, the uſe of ſtrong broths, fat meats, or any thing that palls the appetite, or is hard of digeſtion; the immoderate uſe of ſtroug liquors, tea, tobacco, opium, &c.

The patient ought, if poſſible, to make uſe of an open dry air, to take exerciſe daily on horſeback or in a carriage, to riſe betimes, and to avoid all intenſe thought. He ſhould uſe a diet of eaſy digeſtion, and ſhould avoid exceſſive heat and great fatigue.

If want of appetite proceed from errors in diet or any other part of the patient's regimen, it ought to be changed. If nauſea and retchings ſhew that the ſtomach is loaded with crudities, a vomit will be of ſervice. After this a gentle purge or two of rhubarb, or any of the bitter purging ſalts, may be taken. The patient ought next to uſe ſome of the ſtomachic bitters infuſed in wine. Though gentle evacuation be neceſſary, yet ſtrong purges and vomits are to be avoided, as they weaken the ſtomach, and hurt digeſtion.

Elixir of vitriol is an excellent medicine in moſt caſes of indigeſtion, weakneſs of the ſtomach, or want of

appetite. From twenty to thirty drops of it may be taken twice or thrice a-day in a glaſs of wine or water. It may likewiſe be mixed with the tincture of the bark, one drachm of the former to an ounce of the latter, and two tea ſpoonfuls of it taken in wine and water, as above.

The chalybeate waters, if drank in moderation, are generally of conſiderable ſervice in this caſe. The ſalt water has likewiſe good effects, but it muſt not be uſed too freely. The waters of Harrowgate, Scarborough, Moffat, and moſt other ſpas in Britain, may be uſed with advantage. We would adviſe all who are afflicted with indigeſtion and want of appetite to repair to theſe places of public rendezvous. The very change of air, and the cheerful company, will be of ſervice; not to mention the exerciſe, diſſipation, amuſements, &c.

OF THE HEART-BURN.

What is commonly called the heart-burn is not a diſeaſe of that organ, but an uneaſy ſenſation of heat or acrimony about the pit of the ſtomach, which is ſometimes attended with anxiety, nauſea, and vomiting.

It may proceed from debility of the ſtomach, indigeſtion, bile, the abounding of an acid in the ſtomach, &c. Perſons who are liable to this complaint ought to avoid ſtale liquors, acid, windy or greaſy aliments, and ſhould never uſe violent exerciſe ſoon after a plentiful meal. I know many perſons who never fail to have the heart burn if they ride ſoon after dinner, provided they have drank ale, wine, or any fermented liquor; but are never troubled with it when they have drank rum or brandy and water without any ſugar or acid.

When the heart burn proceeds from debility of the ſtomach, or indigeſtion, the patient ought to take a doſe or two of rhubarb; afterwards he may uſe infuſions of the Peruvian bark, or any other of the ſtomachic bitters, in wine or brandy. Fifteen or twenty drops of the elixir of vitriol, taken in camomile tea, will be of ſervice to ſtrengthen the ſtomach. Exerciſe in the open air will alſo be of uſe.

When bilious humours occaſion the heart burn, a tea ſpoonful of the ſweet ſpirit of nitre in a glaſs of water, or a cup of tea, will generally give eaſe. If it proceeds from the uſe of greaſy aliments, a dram of brandy or rum may be taken.

If acidity or ſourneſs of the ſtomach occaſions the heart burn, abſorbents are the proper medicines. In this caſe an ounce of powdered chalk, half an ounce of fine ſugar, and a quarter of an ounce of gum arabic, many be mixed in an Engliſh quart of water, and a tea cupful of it taken as often as is neceſſary. Such as do not chuſe chalk may take a tea ſpoonful of prepared oyſter ſhells, or of the powder called crabs eyes, in a glaſs of cinnamon or peppermint water. But the ſafeſt and beſt abſorbent is magneſia alba. This not only acts as an abſorbent, but likewiſe as a purgative; whereas chalk and other abſorbents of that kind, are apt to lie in the inteſtines, and occaſion obſtructions. This powder is not diſagreeable, and may be taken in a cup of tea, or a glaſs of mint and water. A large tea ſpoonful is the uſual doſe, but this may be taken in a much greater quantity when there is occaſion. Theſe things are now generally made up into lozenges for the conveniency of being carried in the pocket, and taken at pleaſure.

If wind be the cauſe of this complaint, the moſt proper medicines are thoſe called carminatives; as aniſeeds, juniper berries, ginger, canella alba, cardamom ſeeds, &c. Theſe may either be chewed or infuſed in wine, brandy, or other ſpi its; but as they are only drams in another form, they ſhould not be made uſe of but on the moſt preſſing occaſion, as they are injurious to the ſtomach. One of the ſafeſt methods of this kind, is the tincture made by infuſing an ounce of rhubarb, and a quarter of an ounce of the leſſer cardamom ſeeds, in an Engliſh pint of brandy. After this has digeſted for two or three days, it ought to be ſtrained, and four ounces of white ſugar candy added to it. It muſt ſtand to digeſt a ſecond time till the ſugar be diſſolved. A table ſpoonful may be taken occaſionally for a doſe.

I have frequently known the heart burn cured, par-

ticularly in pregnant women, by chewing green tea. Two table ſpoonfuls of the milk of gum ammoniac, taken once or twice a-day, is alſo a good remedy.

Pregnant women having the heart burn ſhould, as far as poſſible, ſatisfy themſelves whether it proceed from any of the cauſes already mentioned, or be owing to the ſtate of pregnancy itſelf, ariſing from the conſent between the ſtomach and the womb. In this laſt caſe, where it is not attended with much ſpitting, or acrid eructations, the white of an egg mixed with water and a little ſugar, will afford relief.

CHAP. LXIII.

OF NERVOUS DISEASES.

OF all the diſeaſes incident to mankind, thoſe of the nervous kind are the moſt complicated and difficult to cure. A volume would not be ſufficient to point out their various appearances. They imitate almoſt every diſeaſe, and are ſeldom alike in two different perſons, or even the ſame perſon at different times. Proteus like, they are continually changing ſhape, and upon every freſh attack, the patient thinks he feels ſymptoms which he never experienced before. Nor do they only affect the body; the mind likewiſe ſuffers, and is often thereby rendered extremely weak and peeviſh. The low ſpirits, timouroufneſs, melancholy, and fickleneſs of temper, which generally attend nervous diſorders, induce many to believe that they are entirely diſeaſes of the mind; but this change of temper is rather a conſequence, than the cauſe of nervous diſeaſes.

CAUSES.——Every thing that tends to relax or weaken the body, diſpoſes it to nervous diſeaſes, as indolence, exceſſive venery, drinking too much tea, or other weak, watery liquors, frequent bleeding, purging, vomiting, &c. Whatever hurts the digeſtion, or

prevents the proper aſſimilation of the food, has likewiſe this effect; as long faſting, exceſs in eating or drinking, the uſe of windy, crude, or unwholeſome aliments, an unfavourable poſture of the body, &c.

Nervous diſorders often proceed from intenſe application to ſtudy. Indeed, few ſtudious perſons are entirely free from them. Nor is this at all to be wondered at; intenſe thinking not only preys upon the ſpirits, but prevents the perſons from taking proper exerciſe, by which means the digeſtion is impaired, the nouriſhment prevented, the ſolids relaxed, and the whole maſs of humours vitiated. Grief and diſappointment likewiſe produce the ſame effects. I have known more nervous patients who dated the commencement of their diſorders from the loſs of a husband, a favourite child, or ſome other diſappointment in life, than from any other cauſe. In a word, whatever weakens the body, or depreſſes the ſpirits, may occaſion nervous diſorders; as unwholeſome air, want of ſleep, great fatigue, diſagreeable apprehenſions, anxiety, vexation, &c.

SYMPTOMS.——We ſhall only mention ſome of the moſt general ſymptoms of theſe diſorders, as it would be both an uſeleſs and endleſs task to enumerate the whole. They generally begin with windy inflations or diſtentions of the ſtomach aud inteſtines; the appetite and digeſtion are uſually bad, yet ſometimes there is an uncommon craving for food, and a quick digeſtion. The food often turns ſour on the ſtomach, and the patient is troubled with vomiting of clear water, tough phlegm, or a blackiſh coloured liquor, reſembling the grounds of coffee. Excruciating pains are often felt about the navel, attended with a rumbling or murmuring noiſe in the bowels. The body is ſometimes looſe, but more commonly bound, which occaſions retention of wind and great uneaſineſs.

The urine is ſometimes in ſmall quantity, at other times very copious and quite clear. There is a great ſtraitneſs of the breaſt, with difficulty of breathing; violent palpitations of the heart, ſudden flushings of heat in various parts of the body; at other times, a

ſenſe of cold, as if water were poured over them: flying pains in the arms and limbs, pains in the back and belly, reſembling thoſe occaſioned by gravel; the pulſe very variable, ſometimes uncommonly ſlow, and at other times very quick; yawning, the hiccup, frequent ſighing, and a ſenſe of ſuffocation, as if from a ball or lump in the throat; alternate fits of crying and convulſive laughing, the ſleep is unſound, and ſeldom refreſhing, and the patient is often troubled with the night mare.

As the diſeaſe increaſes the patient is moleſted with head achs, cramps, and fixed pains in various parts of the body, the eyes are clouded, and often affected with pain and dryneſs; there is a noiſe in the ears, and often a dulneſs of hearing; in ſhort the whole animal functions are impaired. The mind is diſturbed on the moſt trivial occaſions, and is hurried into the moſt perverſe commotions, inquietude, terror, ſadneſs, anger, diffidence, &c. The patient is apt to entertain wild imaginations and extravagant fancies; the memory becomes weak, and the judgment fails.

Nothing is more characteriſtic of this diſeaſe than a conſtant dread of death. This renders thoſe unhappy perſons who labour under it peeviſh, fickle, impatient, and apt to run from one phyſician to another, which is one reaſon why they ſeldom reap the benefit from medicine, as they have not ſufficient reſolution to perſiſt in any one courſe till it has time to produce its proper effects. They are likewiſe apt to imagine that they labour under diſeaſes from which they are quite free, and are very angry if any one attempts to ſet them right, or laugh them out of their ridiculous notions.

REGIMEN.——Perſons afflicted with nervous diſeaſes ought never to faſt long. Their food ſhould be ſolid and nouriſhing, but eaſy of digeſtion. Fat meats and heavy ſauces are hurtful; all exceſs ſhould be avoided; and they ought never to eat more at a time than they can digeſt. If they feel themſelves weak and faint between meals, they ought to eat a bit of bread, and drink a glaſs of wine. Though wine in exceſs enfeebles

the body, and impairs the faculties of the mind, yet taken in moderation, it ſtrengthens the ſtomach, and promotes digeſtion. Wine and water is a very proper drink at meals; but if wine ſours on the ſtomach or the patient is much troubled with wind, brandy and water will anſwer better. Every thing that is windy or hard of digeſtion muſt be avoided. All weak and warm liquors are hurtful, as tea, coffee, punch, &c. People may find temporary relief in the uſe of theſe, but they always increaſe the malady, as they weaken the ſtomach and hurt digeſtion. Above all things, drams are to be avoided. Whatever immediate eaſe the patient may feel from the uſe of ardent ſpirits, they are ſure to aggravate the malady, and prove certain poiſons at laſt. Theſe cautions are the more neceſſary, as moſt nervous people are peculiarly fond of tea and ardent ſpirits; to the uſe of which many of them fall victims.

Exerciſe in nervous diſorders is ſuperior to all medicines. Riding on horſeback is generally eſteemed the beſt, as it gives motion to the whole body, without fatiguing it. I have known ſome patients, however, with whom walking agreed better, and others who were moſt benefited by riding in a carriage. Every one ought to uſe that which he finds moſt beneficial. Long ſea voyages have an excellent effect, and to thoſe who are poſſeſſed of ſufficient reſolution, we would by all means recommend this courſe. Even change of place, and the ſight of new objects, by diverting the mind, have a great tendency to remove theſe complaints. For this reaſon, a long journey, or a voyage, is of much more advantage than riding ſhort journies near home.

A cool and dry air is proper, as it braces and invigorates the whole body. Few things tend more to relax and enervate than hot air, eſpecially that which is rendered ſo by great fires, or ſtoves in ſmall apartments. But when the ſtomach or bowels are weak, the body ought to be well guarded againſt cold, eſpecially in winter, by wearing a thin flannel waiſtcoat next the ſkin. This will keep up an equal perſpiration, and defend the alimentary canal from many impreſſions to

which it would otherwiſe be ſubject, upon every ſudden change from warm to cold weather. Rubbing the body frequently with a fleſh-bruſh, or a coarſe linen cloth, is likewiſe beneficial, as it promotes the circulation, perſpiration, &c. Perſons who have weak nerves ought to riſe early, and take exerciſe before breakfaſt, as lying too long in a bed cannot fail to relax the ſolids. They ought likewiſe to be diverted, and to be kept as eaſy and cheerful as poſſible. There is not any thing which hurts the nervous ſyſtem, or weakneſs the digeſtive powers, more than fear, grief, or anxiety.

MEDICINES.——Though nervous diſeaſes are ſeldom radically cured, yet their ſymptoms may ſometimes be alleviated, and the patient's life rendered at leaſt more comfortable by proper medicines.

When the patient is coſtive he ought to take a little rhubarb, or ſome other mild purgative, and ſhould never ſuffer his body to be long bound. All ſtrong and violent purgatives are, however, to be avoided, as aloes, jalap, &c. I have generally ſeen an infuſion of ſenna and rhubarb in brandy anſwer very well. This may be made of any ſtrength, and taken in ſuch quantity as the patient finds neceſſary. When digeſtion is bad, or the ſtomach relaxed and weak, the following infuſion of Peruvian bark and other bitters may be uſed with advantage:

Take of Peruvian bark an ounce, gentian root, orange peel, and coriander ſeed, of each half an ounce; let theſe ingredients be all bruiſed in a mortar, and infuſed in a bottle of brandy or gin for the ſpace of five or ſix days. A table ſpoonful of the ſtrained liquor may be taken in half a glaſs of water, an hour before breakfaſt, dinner, and ſupper.

Few things tend more to ſtrengthen the nervous ſyſtem than cold bathing. This practice, if duly perſiſted in, will produce very extraordinary effects; but when the liver or other viſcera are obſtructed, or otherwiſe unſound, the cold bath is improper. It is therefore to be uſed with great caution. The moſt proper

ſeaſons for it are ſummer and autumn. It will be ſufficient, eſpecially for perſons of a ſpare habit, to go into the cold bath three or four times a-week. If the patient be weakened by it, or feels chilly for a long time after coming out, it is improper.

In patients afflicted with wind, I have always obſerv- the greateſt benefit from the elixir of vitriol. It may be taken in the quantity of fifteen, twenty, or thirty drops, twice or thrice-a day, in a glaſs of water. This both expels wind, ſtrengthens the ſtomach, and promotes digeſtion.

Opiates are generally extolled in theſe maladies; but as they only palliate the ſymptoms, and generally afterwards increaſe the diſeaſe, we would adviſe people to be extremely ſparing in the uſe of them, leſt habit ſhould render them at laſt abſolutely neceſſary.

It would be an eaſy matter to enumerate many medicines which have been extolled for relieving nervous diſorders; but whoever wiſhes for a thorough cure, muſt expect it from regimen alone: we ſhall therefore omit mentioning more medicines, and again recommend the ſtricteſt attention to *diet*, *air*, *exercise*, and *amuſements*.

OF MELANCHOLY.

Melancholy is that ſtate of alienation or weakneſs of mind which renders people incapable of enjoying the pleaſures, or performing the duties of life. It is a degree of inſanity, and often terminates in abſolute madneſs.

CAUSES.—It may proceed from an hereditary diſpoſition, intenſe thinking, eſpecially where the mind is long occupied about one object; violent paſſions or affections of the mind, as love, fear, joy, grief, pride, and ſuch like. It may alſo be occaſioned by exceſſive venery, narcotic, or ſtupefactive poiſons, a ſedentary life, ſolitude, the ſuppreſſion of cuſtomary evacuations, acute fevers, or other diſeaſes. Violent anger will change melancholy into madneſs, and exceſſive cold, eſpecially of the lower extremities, will force

the blood into the brain, and produce all the ſymptoms of madneſs. It may likewiſe proceed from the uſe of aliment that is hard of digeſtion, or which cannot be eaſily aſſimilated; from a callous ſtate of the integuments of the brain, or a dryneſs of the brain itſelf. To all which we may add gloomy and miſtaken notions of religion.

SYMPTOMS.—When perſons begin to be melancholy, they are dull, dejected, timorous, watchful, fond of ſolitude, fretful, fickle, captious and inquiſitive, ſolicitous about trifles, ſometimes niggardly, and at other times prodigal; the body is generally bound, the urine thin and in ſmall quantity, the ſtomach and bowels inflated with wind, the complexion pale, the pulſe ſlow and weak; the functions of the mind are alſo greatly perverted, inſomuch that the patient often imagines himſelf dead, or changed into ſome other animal. Some have imagined their bodies were made of glaſs or other brittle ſubſtances, and were afraid to move, leſt they ſhould be broken to pieces. The unhappy patient, in this caſe, unleſs carefully watched, is apt to put an end to his own miſerable life.

When the diſeaſe is owing to any obſtruction of cuſtomary evacuations, or any bodily diſorder, it is eaſier cured than when it proceeds from affections of the mind, or an hereditary taint. A diſcharge of blood from the noſe, looſeneſs, ſcabby eruptions, the bleeding piles, or the *menſes*, ſometimes carry off this diſeaſe.

REGIMEN.——The diet ſhould conſiſt chiefly of vegetables of a cooling and opening quality. Animal food, eſpecially ſalted or ſmoke-dried fiſh or fleſh, ought to be avoided. All kinds of ſhell-fiſh are bad. Aliments prepared with onions, garlic, or any thing that generates thick blood, are likewiſe improper. All kinds of fruits that are wholeſome may be eaten with advantage. Boerhaave gives an inſtance of a patient who, by a long uſe of whey, water and garden-fruit, recovered, after having evacuated a great qantity of black-coloured matter.

Strong liquors of every kind ought to be avoided as poiſon. The moſt proper drink is water, whey, or very

ſmall beer. Tea and coffee are improper. If honey agrees with the patient, it may be eaten freely, or his drink may be ſweetened with it. Infuſion of balm-leaves, penny royal, the roots of wild valerian, or the flowers of the lime-tree may be drank freely, either by themſelves or ſweetened with honey, as the patient ſhall chooſe.

The patient ought to take as much exerciſe in the open air as he can bear. This helps to diſſolve the viſcid humours, it removes obſtructions, promotes the perſpiration and all the other ſecretions. Every kind of madneſs is attended with a diminiſhed perſpiration; all means ought therefore be uſed to promote that neceſſary and ſalutary diſcharge. Nothing can have a more direct tendency to increaſe the diſeaſe, than confining the patient to a cloſe apartment. Were he forced to ride or walk a certain number of miles every day, it would ſtill have a better effect if he were obliged to labour a piece of ground. By digging, hoeing, planting, ſowing, &c. both the body and mind would be exerciſed. A long journey, or a voyage, eſpecially towards a warmer climate, with agreeable companions, has often very happy effects. A plan of this kind, with a ſtrict attention to diet, is a much more rational method of cure than confining the patient within doors, and plying him with medicines.

MEDICINE.—In the cure of this diſeaſe, particular attention muſt be paid to the mind. When the patient is in a low ſtate, his mind ought to be ſoothed and diverted with variety of amuſements, as entertaining ſtories, paſtimes, muſic, &c. This ſeems to have been the method of curing melancholy among the Jews, as we learn from the ſtory of king Saul, and indeed it is a very rational one. Nothing can remove the diſeaſe of the mind ſo effectually as applications to the mind itſelf, the moſt efficacious of which is muſic. The patient's company ought likewiſe to conſiſt of ſuch perſons as are agreeable to him. People in this ſtate are apt to conceive unaccountable averſions againſt particular perſons, and the very ſight of ſuch perſons is ſufficient

to diſtract their minds, and throw them into the utmoſt perturbation. In every ſpecies of inſanity, care ſhould be taken not to vex the mind by contradiction.

When the patient is high, evacuations are neceſſary. In this caſe he muſt be bled, and have his body kept open by purging medicines, as manna, rhubarb, cream of tartar, or the ſoluble tartar. I have ſeen the laſt have very happy effects. It may be taken in the doſe of half an ounce, diſſolved in water-gruel, every day, for ſeveral weeks, or even months, if neceſſary. More or leſs may be given according as it operates. Vomits have likewiſe a good effect; but they muſt be pretty ſtrong, otherwiſe they will not operate.

Whatever increaſes the evacuation of urine or promotes perſpiration, has a tendency to remove this diſeaſe. Both theſe ſecretions may be promoted by the uſe of nitre and vinegar. Half a dram of purified nitre may be given three or four times a-day in any manner that is moſt agreeable to the patient; and an ounce and a half of diſtilled vinegar may be daily mixed with his drink. Dr. Locker ſeems to think vinegar the beſt medicine that can be given in this diſeaſe.

Camphire and muſk have likewiſe been uſed in this caſe with advantage. Ten or twelve grains of camphire may be rubbed in a mortar, with half a dram of nitre, and taken twice a-day, or oftener, if the ſtomach will bear it. If it will not ſit upon the ſtomach in this form, it may be made into pills with gum aſafœtida and Ruſſian caſtor, and taken in the quantity above directed. If muſk is to be adminiſtered, a ſcruple, or twenty-five grains of it may be made into a bolus with a little honey or common ſyrup, and taken twice or thrice a-day. Antimonial wine is recommended in the cure of this diſeaſe. Forty or fifty drops will be a ſufficient doſe, taken three or four times a-day in a diſh of tea. We do not mean that all the medicine ſhould be adminiſtered at once, but whichever of them is given, muſt be duly perſiſted in, and where one fails another may be tried.

As it is very difficult to induce patients in this diſeaſe to take medicines, we ſhall mention a few outward applications which ſometimes do good; the principal of theſe are iſſues, ſetons, and warm bathing. Iſſues may be made in any part of the body, but they generally have the beſt effect near the ſpine. The diſcharge from theſe may be greatly promoted by dreſſing them with the mild bliſtering ointment, and keeping what are commonly called the orrice peas in them. The moſt proper place for a ſeton is between the ſhoulder blades; and it ought to be placed upwards and downwards, or in the direction of the ſpine.

OF THE PALSY.

The palſy is a loſs or diminution of ſenſe or motion, or of both, in one or more parts of the body. Of all the affections called nervous, that is the moſt ſuddenly fatal. It is more or leſs dangerous according to the importance of the part affected. A palſy of the heart, lungs, or any part neceſſary to life, is mortal. When it affects the ſtomach, the inteſtines, or the bladder, it is highly dangerous. If the face be affected the caſe is bad, as it ſhews that the diſeaſe proceeds from the brain. When the part affected feels cold, is inſenſible, or waſtes away, or when the judgment and memory begin to fail, there is ſmall hope of a cure.

CAUSES.——The immediate cauſe of palſy is any thing that prevents the regular exertion of the nervous power upon any particular muſcle or part of the body. The occaſional and prediſpoſing cauſes are various, as drunkenneſs, wounds of the brain, or ſpinal marrow, preſſure upon the brain or nerves, very cold or damp air, the ſuppreſſion of cuſtomary evacuations, ſudden fear, want of exerciſe, or whatever greatly relaxes the ſyſtem, as drinking much tea *, or coffee. The palſy,

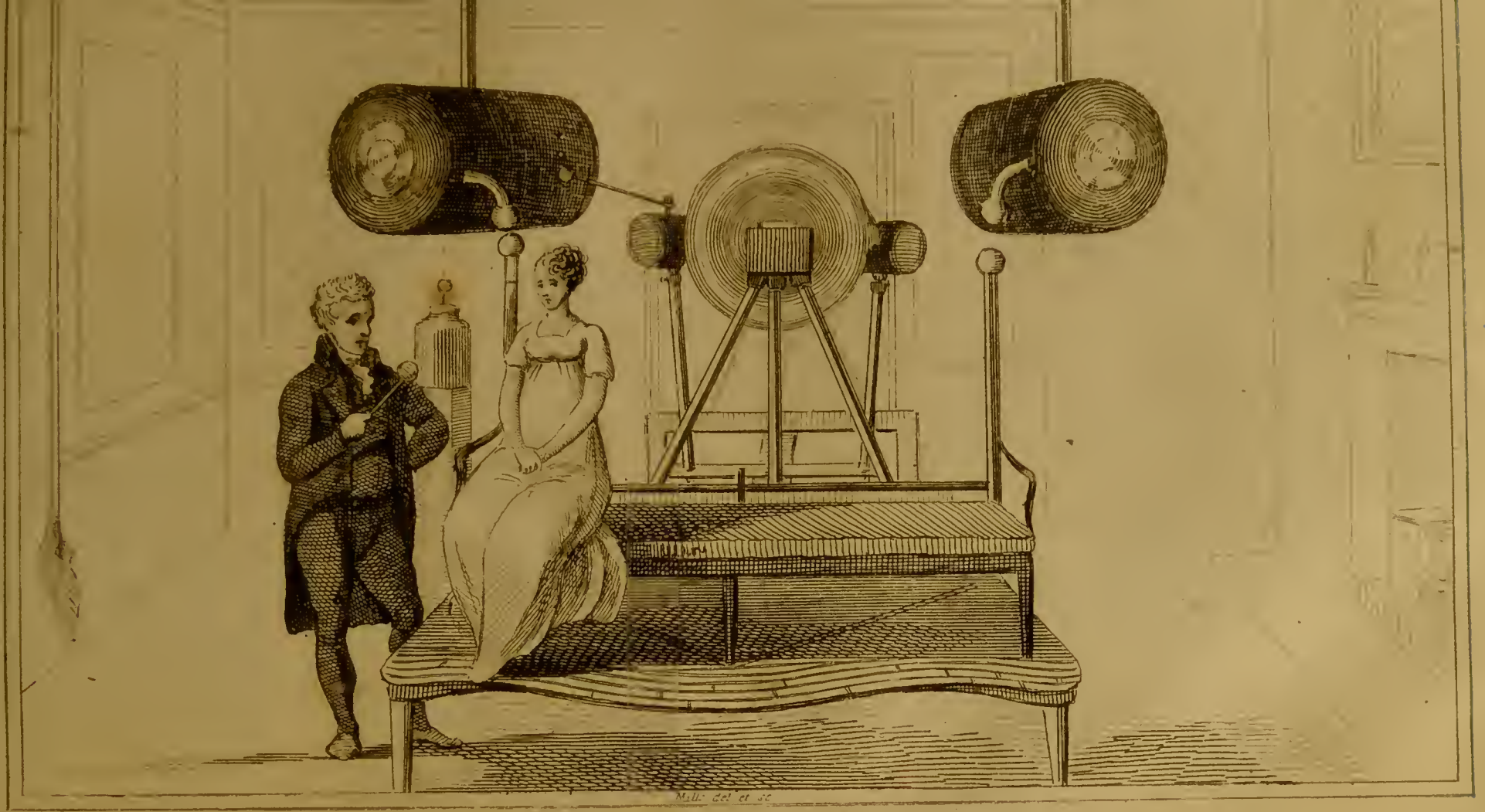
* Many people imagine that tea has no tendency to hurt the nerves, and that drinking the ſame quantity of warm water would be equally pernicious. This, however, ſeems to be a miſtake. Many

may likewiſe proceed from wounds of the nerves themſelves, from the poiſonous fumes of metals or minerals, as mercury, lead, arſenic, &c.

In young perſons of a full habit, the palſy muſt be treated in the ſame manner as the ſanguine apoplexy. The patient muſt be bled, bliſtered, and have his body opened by ſharp clyſters or purgative medicines. But in old age, or when the diſeaſe proceeds from relaxation or debility, which is generally the caſe, a contrary courſe muſt be purſued. The diet muſt be warm and invigorating, ſeaſoned with ſpicy and aromatic vegetables, as muſtard, horſe-radiſh, &c. The drink may be generous wine, muſtard whey, or brandy and water. Friction with the fleſh bruſh, or a warm hand, is extremely proper, eſpecially on the parts affected. Bliſtering plaſters may likewiſe be applied to the affected parts with advantage. When this cannot be done, they may be rubbed with the volatile liniment, or the nerve ointment of the Edinburgh diſpenſatory. One of the beſt external applications is electricity. The ſhocks, or rather vibrations, ſhould be received on the part affected; and they ought daily to be repeated for ſeveral weeks.

Vomits are very beneficial in this kind of palſy, and ought frequently to be adminiſtered. Cephalic ſnuff, or any thing that makes the patient ſneeze, is likewiſe of uſe. Some pretend to have found great benefit from rubbing the parts affected with nettles, but this does not ſeem to be any way preferable to bliſtering. If the tongue be affected, the patient may gargle his mouth frequently with brandy and muſtard, or he may hold a bit of ſugar in his mouth, wet with the palſy drops, or compound ſpirits of lavender. The wild valerian root is a very proper medicine in this caſe. It may either be taken in an infuſion with ſage leaves, or half a

persons drink three or four cups of warm milk and water, without feeling any bad conſequences; yet the ſame quantity of tea will make their hands ſhake for twenty four hours. That tea affects the nerves, is likewiſe evident from its preventing ſleep, occaſioning giddineſs, dimneſs of the ſight, ſickneſs, &c.



GRAND ELECTRICAL APPARATUS,

In the posſeſsion of Mr. F. Lowndes, Medical Electrician, St. Paul's Church Yard. This Machine, esteemed the moſt Complete and powerful in Europe, has established the Medical character of the Electric fluid as an efficient remedy in many of the most obstinate diseases.

dram of it in powder may be given in a glaſs of wine three times a-day. If the patient cannot uſe the valerian, he may take ſal volatile oleoſum, compound ſpirits of lavender, and tincture of caſtor, each half an ounce; mix theſe together, and take forty or fifty drops in a glaſs of wine three or four times a-day. A table ſpoonful of muſtard ſeed taken frequently is a very good medicine. The patient ought likewiſe to chew cinnamon bark, ginger, or other warm ſpices.

Exerciſe is of the utmoſt importance in the palſy; but the patient muſt beware of cold, damp, and moiſt air. He ought to wear flannel next his ſkin, and if poſſible ſhould remove into a warmer climate.

Of the EPILEPSY, or FALLING SICKNESS.

The epilepſy is a ſudden deprivation of all the ſenſes, wherein the patient falls ſuddenly down and is affected with violent convulſive motions. Children, eſpecially thoſe who are delicately brought up, are moſt ſubject to it. It more frequently attacks men than women, and is very difficult to cure. When the epilepſy attacks children, there is reaſon to hope it may go off about the time of puberty. When it attacks any perſon after twenty years of age the cure is difficult; but when after forty a cure is hardly to be expected. If the fit continues only for a ſhort ſpace, and returns ſeldom, there is reaſon to hope; but if it continues long and returns frequently, the proſpect is bad. It is a very unfavourable ſymptom when the patient is ſeized with the fits in his ſleep.

CAUSES.—The epilepſy is ſometimes hereditary. It may likewiſe proceed from blows, bruiſes, or wounds on the head; a collection of water, blood, or ſerous humours in the brain, a polypus, tumours, or concretions within the ſkull, exceſſive drinking, intenſe ſtudy, exceſs of venery, worms, teething, ſuppreſſion of cuſtomary evacuations, too great emptineſs or repletion, violent paſſions or affections, contagion received into the body, as the infection of the ſmall pox, meaſles, &c.

SYMPTOMS.—An epileptic fit is generally preceded by unuſual wearineſs, pain of the head, dulneſs, giddineſs, noiſe in the ears, dimneſs of the ſight, palpitation of the heart, diſturbed ſleep, difficult breathing, the bowels are inflated with wind, the urine is in great quantity, but thin, the complexion is pale, the extremities are cold, and the patient often feels, as it were, a ſtream of cold air aſcending towards his head.

In the fit, the patient generally makes an unuſual noiſe, his thumbs are drawn in towards the palms of the hands, his eyes are diſtorted, he ſtarts, and foams at the mouth, his extremities are bent or twiſted various ways, he often diſcharges his ſeed, urine, and fæces involuntarily, and is quite deſtitute of all ſenſe and reaſon. After the fit is over, his ſenſes gradually return, and he complains of a kind of ſtupor, wearineſs, and pain of his head, but has no remembrance of what happened to him during the fit.

The fits are ſometimes excited by violent affections of the mind, a debauch of liquor, exceſſive heat, cold, or the like.

This diſeaſe, from the difficulty of inveſtigating its cauſes, and its ſtrange ſymptoms, was formerly attributed to the wrath of the gods or the agency of evil ſpirits. In modern times, it has often by the vulgar been imputed to witchcraft and faſcination. It depends however as much upon natural cauſes as any other malady, and its cure may often be effected by perſiſting in the uſe of proper means.

REGIMEN.——Epileptic patients ought, if poſſible, to breathe a pure and free air. Their diet ſhould be light but nouriſhing. They ought to drink nothing ſtrong, to avoid ſwine's fleſh, water fowl, and likewiſe all windy and oily vegetables, as cabbage, nuts, &c. They ought to keep themſelves cheerful, carefully guarding againſt all violent paſſions, as anger, fear, exceſſive joy, and the like.

Exerciſe is likewiſe of great uſe, but the patient muſt be careful to avoid all extremes either of heat or cold,

all dangerous ſituations, as ſtanding upon precipices, riding, deep waters, and ſuch like.

MEDICINE.——The intention of cure muſt vary according to the cauſe of the diſeaſe. If the patient be of a ſanguine temperemant, and there be reaſon to fear an obſtruction in the brain, bleeding and other evacuations will be neceſſary. When the diſeaſe is occaſioned by the ſtoppage of cuſtomary evacuations, theſe, if poſſible, muſt be reſtored: if this cannot be done, others may be ſubſtituted in their place. Iſſues or ſetons in this caſe have often a very good effect. When there is reaſon to believe that the diſeaſe proceeds from worms, proper medicines muſt be uſed to kill, or carry off theſe vermin. When the diſeaſe proceeds from teething, the body ſhould be kept open by emollient clyſters, the feet frequently bathed in warm water, and if the fits prove obſtinate, a bliſtering-plaſter may be put between the ſhoulders. The ſame method is to be followed, when epileptic fits precede the eruption of the ſmall pox, or meaſles, &c.

When the diſeaſe is hereditary, or proceeds from a wrong formation of the brain, a cure is not to be expected. When it is owing to a debility, or too great an irritability of the nervous ſyſtem, ſuch medicine as tend to brace and ſtrengthen the nerves may be uſed, as the Peruvian bark, and ſteel; or the *anti-epileptic* electuaries recommended by Fuller and Mead.

The flowers of zinc have of late been highly extolled for the cure of the epilepſy. Though this medicine will not be found to anſwer the expectations which have been raiſed concerning it, yet in obſtinate epileptic caſes it deſerves a trial. The doſe is from one to three or four grains, which may be taken either in pills or a bolus, as the patient inclines. The beſt method is to begin with a ſingle grain four or five times a day, and gradually to increaſe the doſe as far as the patient can bear it. I have often known this medicine, when duly perſiſted in, prove beneficial.

CRAMP OF THE STOMACH.

This diſeaſe often ſeizes people ſuddenly, is very dangerous, and requires immediate aſſiſtance. It is moſt incident to perſons in the decline of life, eſpecially the nervous, gouty, hyſteric, and hypochondriac.

If the patient has any inclination to vomit, he ought to take ſome draughts of warm water, or weak camomile-tea, to cleanſe his ſtomach. After this, if he has been coſtive, a laxative clyſter, may be given. He ought then to take laudanum. The beſt way of adminiſtering it is in a clyſter. Sixty or ſeventy drops of liquid laudanum may be given in a clyſter of warm water. This is much more certain than laudanum given by the mouth, which is often vomited, and in ſome caſes increaſes the pain and ſpaſms in the ſtomach.

If the pain and cramps return with great violence, after the effects of the anodyne clyſter are over, another, with an equal or larger quantity of opium, may be given; and every four or five hours a bolus, with ten or twelve grains of muſk, and half a drachm of the Venice treacle. In the mean time, the ſtomach ought to be fomented with cloths dipped in warm water, or bladders filled with warm milk and water ſhould be conſtantly applied to it. I have often ſeen theſe produce the most happy effects. The anodyne balſam may alſo be rubbed on the part affected; and an anti-hyſteric plaſter worn upon it for ſome time after the cramps are removed, to prevent their return.

In very violent and laſting pains of the ſtomach, ſome blood ought to be let, unleſs the weakneſs of the patient forbids it. When the pain or cramps proceed from a ſuppreſſion of the *menſes*, bleeding is of uſe. If they be owing to the gout, recourſe muſt be had to ſpirits, or ſome of the warm cordial waters. Bliſtering-plaſters ought likewiſe in this caſe to be applied to the ancles. I have often ſeen violent cramps and pains of the ſtomach removed by covering it with a large plaſter of Venice treacle.

OF THE NIGHT-MARE.

In this diſeaſe the patient in the time of ſleep, imagines he feels an uncommon oppreſſion of weight about his breaſt or ſtomach, which he can by no means ſhake off. He groans and ſometimes cries out, though oftener he attempts to ſpeak in vain. Sometimes he imagines himſelf engaged with an enemy, and in danger of being killed, attempts to run away, but finds he cannot. Sometimes the fancies himſelf in a houſe that is on fire, or that he is in danger of being drowned in a river. He often thinks he is falling over a precipice, and the dread of being daſhed to pieces ſuddenly awakes him.

This diſorder has been ſuppoſed to proceed from too much blood; from a ſtagnation of blood in the brain, lungs, &c. But it is rather a nervous affection and ariſes chiefly from indigeſtion. Hence we find that perſons of weak nerves, who lead a ſedentary life, and live full, are moſt commonly afflicted with the night-mare. Nothing tends more to produce it than heavy ſupper, eſpecially when eaten late, or the patient goes to bed ſoon after. Wind is likewiſe a very frequent cauſe of this diſeaſe; for which reaſon thoſe who are afflicted with it ought to avoid all flatulent food. Deep thought, anxiety, or any thing that oppreſſes the mind, ought alſo to be avoided.

As perſons afflicted with the night-mare, generally moan, or make ſome noiſe in the fit, they ſhould be waked, or ſpoken to by ſuch as hear them, as the uneaſineſs generally goes off as ſoon as the patient is awake. Dr. Whyte ſays, he generally found a dram of brandy, taken at bed-time, prevent this diſeaſe. That however is a bad cuſtom, and in time loſes its effect. We would rather have the patient depend upon the uſe of food of eaſy digeſtion, cheerfulneſs, exerciſe through the day, and a light ſupper taken early, than to accuſtom himſelf to drams. A glaſs of peppermint-water will often promote digeſtion as much as a glaſs of brandy, and is much ſafer. After a perſon of weak digeſtion, however,

has eaten flatulent food, a dram may be neceſſary; in this caſe we would recommend it as the moſt proper medicine.

Perſons who are young, and full of blood, if troubled with the night-mare, ought to take a purge frequently and uſe a ſpare diet.

OF SWOONINGS.

People of weak nerves or delicate conſtitution are liable to ſwooning or fainting fits. Theſe indeed are ſeldom dangerous when duly attended to; but when wholly neglected, or improperly treated, they often prove hurtful, and ſometimes fatal.

The general cauſes of ſwooning are, ſudden tranſition from cold to heat; breathing air that is deprived of its proper ſpring or elaſticity; great fatigue; exceſſive weakneſs; loſs of blood; long faſting; fear, grief, and other violent paſſions or affections of the mind.

It is well known that perſons who have been long expoſed to cold, often faint or fall into a ſwoon, upon coming into the houſe, eſpecially if they drink hot liquor, or ſit near a large fire. This might eaſily be prevented by people taking care not to go into a warm room immediately after they have been expoſed to the cold air, to approach the fire gradually, and not to eat or drink any thing hot, till the body has been gradully brought into a warm temperature.

When any one, in conſequence of neglecting theſe precautions, falls into a ſwoon, he ought immediately to be removed to a cooler apartment, to have ligatures applied above his knees and elbows, and to have his hands and face ſprinkled with vinegar or cold water. He ſhould likewiſe be made to ſmell to vinegar, and ſhould have a ſpoonful or two of water if he can ſwallow, with about a third part of vinegar mixed with it, poured into his mouth. If theſe ſhould not remove the complaint, it may be neceſſary to bleed the patient, and afterwards to give him a clyſter.

As air that is breathed frequently loſes its elaſticity or

ſpring, it is no wonder if perſons who reſpire in it often fall into a ſwoon or fainting fit. They are in this caſe deprived of the very principal of life. Hence it is that fainting fits are ſo frequent in all crowed aſſemblies, eſpecially in hot ſeaſons. Such fits, however, muſt be conſidered as kind of temporary death; and, to the weak and delicate, they ſometimes prove fatal. They ought therefore with the utmoſt care to be guarded againſt. The method of doing this is obvious. Let aſſembly-rooms, and all other places of public reſort, be large and well ventilated; and let the weak and delicate avoid ſuch places, particularly in warm ſeaſons.

A perſon who faints in ſuch a ſituation, ought immediately to be carried into the open air; his temples ſhould be rubbed with ſtrong vinegar or brandy, and volatile ſpirits or ſalts held to his noſe. He ſhould be laid upon his back with his head low, and have a little wine or ſome other cordial as ſoon as he was able to ſwallow it, poured into his mouth. If the perſon has been ſubject to hyſteric fits, caſtor or aſafœtida ſhould be applied to the noſe or burnt feathers, horn, or leather, &c.

When fainting fits proceed from mere weakneſs or exhauſtion, which is often the caſe after great fatigue, long faſting, loſs of blood, or the like, the patient muſt be ſupported with generous cordials, as jellies, wines, ſpirituous liquors, and ſuch like. Theſe, however, muſt be given at firſt in very ſmall quantities, and increaſed gradually as the patient is able to bear them. He ought to be allowed to lie quite, ſtill, and eaſy, upon his back, with his head low, and ſhould have freſh air admitted into his chamber. His food ſhould conſiſt of nouriſhing broths, ſago-gruel with wine, new milk, and other things of a light and cordial nature. Theſe things are to be given out of the fit. All that can be done in the fit is, to let him ſmell to a bottle of Hungary-water, *eau de luce*, or ſpirits of hartſhorn, and to rub his temples with warm brandy, or to lay a compreſs dipped in it to the pit of the ſtomach.

In fainting fits that proceed from feat, grief, or other violent paſſions or affections of the mind, the patient muſt

be very cautiouſly managed. He ſhould be ſuffered to remain at reſt, and only made to ſmell to ſome vinegar. After he is come to himſelf, he may drink freely of warm lemonade, or balm tea, with ſome orange or lemon-peel in it. It will likewiſe be proper, if the fainting fits have been long and ſevere, to clean the bowels, by throwing in an emollient clyſter.

It is common in fainting fits, from whatever cauſe they proceed, to bleed the patient. This practice may be very proper in ſtrong perſons of a full habit; but in thoſe who are weak and delicate, or ſubject to nervous diſorders, it is dangerous. The proper method with ſuch people is, to expoſe them to the free air, and to uſe cordial and ſtimulating medicines, as volatile ſalts, Hungary-water, ſpirit of lavender, tincture of caſtor, and the like.

OF FLATULENCIES, OR WIND.

All nervous patients, without exception, are afflicted with wind or flatulency in the ſtomach and bowels, which ariſe chiefly from the want of tone or vigour in theſe organs. Crude, flatulent aliment, as green peas, beans, coleworts, cabbages, and ſuch like, may increaſe this complaint; but ſtrong and heathy people are ſeldom troubled with wind, unleſs they either overload their ſtomachs or drink liquors that are in a fermenting ſtate, and conſequently full of elaſtic air. While therefore the matter of flatulence proceeds from our aliments, the cauſe which makes air ſeparate from them in ſuch quantity as to occaſion complaints, is almoſt always a fault of the bowels themſelves, which are too weak either to prevent the production of elaſtic air, or to expel it after it is produced.

To relieve this complaint, ſuch medicines ought to be uſed as have a tendency to expel wind, and by ſtrengthening the alimentary canal, to prevent its being produced there*.

* Many nervous people find great benefit from eating a dry biscuit, especially when the stomach is empty. I look upon this as one

The liſt of medicines for expelling wind is very numerous; they often, however, diſappoint the expectations of both the phyſician and his patient. The moſt celebrated among the claſs of carminatives are juniper berries; the roots of ginger and zedoary; the ſeeds of aniſe, carraway, and coriander; gum aſafœtida and opium; the warm waters, tinctures, and ſpirits, as the aromatic water, the tincture of woodſoot, the volatile aromatic ſpirit, æther, &c.

Dr. Whyte ſays, he found no medicines more efficacious in expelling wind than æther and laudanum. He generally gave the laudanum in a mixture with peppermint water and tincture of caſtor, or ſweet ſpirits of nitre. Sometimes, in place of this, he gave opium in pills with aſafœtida. He obſerves that the good effects of opiates are equally conſpicuous, whether the flatulence be contained in the ſtomach or inteſtines, whereas thoſe warm medicines, commonly called carminatives, do not often give immediate relief, except when the wind is in the ſtomach.

With regard to æther, the doctor ſays he has often ſeen very good effects from it in flatulent complaints, where other medicines have failed. The doſe is a tea ſpoonful mixed with two table ſpoonfuls of water *. In gouty caſes, he obſerves, that æther, a glaſs of French brandy, or of the aromatic water, or ginger, either taken in ſubſtance, or infuſed in boiling water, are among the beſt medicines for expelling wind.

When the caſe of flatulent patients is ſuch as makes it improper to give them warm medicines inwardly, the doctor recommends external applications, which are ſometimes of advantage. Equal parts of the antihyſteric and ſtomach plaſter may be ſpread upon a piece of ſoft leather, of ſuch ſize as to cover the greater part

of the best carminative medicines; and would recommend it in all complaints of the stomach arising from flatulence, indigestion, &c.

* Though the patient may begin with this quantity, it will be necessary to increase the dose gradually as the stomach can bear it. Æthiops is now give in considerably greater doses than it was in Dr. Whyte's time.

of the belly. This ſhould be kept on for a conſiderable time, provided the patient be able to bear it; if it ſhould give great uneaſineſs it may be taken off, and the following liniment uſed in its ſtead:

Take of Bates' anodyne balſam an ounce; of the expreſſed oil of mace half an ounce; oil of mint two drachms. Let theſe ingredients be mixed together, and about a table ſpoonful well rubbed on the parts at bed time.

For ſtrengthening the ſtomach and bowels, and conſequently for leſſening the production of flatulence, the doctor recommends the Peruvian bark, bitters, chalybeates and exerciſe. In flatulent caſes, he thinks ſome nutmeg or ginger ſhould be added to the tincture of the bark and bitters, and that the aromatic powder ſhould be joined with the filings of iron.

When windy complaints are attended with coſtiveneſs, which is often the caſe, few things will be found to anſwer better than four or five of the following pills taken every night at bed time:

Take aſafœtida two drachms; ſuccotrine aloes, ſalt of iron, and powdered ginger, of each one drachm; as much of the elixir proprietatis as will be ſufficient to form them into pills.

On the other hand, when the body is too open, twelve or fifteen grains of rhubarb, with half a drachm or two ſcruples of the Japonic confection, given every other evening, will have very good effects.

In thoſe flatulent complaints which come on about the time the menſes ceaſe, repeated ſmall bleedings often give more relief than any other remedy.

With regard to diet, the doctor obſerves, that tea, and likewiſe all flatulent aliments, are to be avoided; and that for drink, water with a little brandy or rum, is not only preferable to malt liquor, but in moſt caſes alſo to wine.

As Dr. Whyte has paid great attention to this ſubject, and as his ſentiments upon it in a great meaſure agree with mine, I have taken the liberty to adopt them, and ſhall only add to his obſervations, that exer-

ercise is in my opinion superior to all medicine, both for preventing the production, and likewise for expelling of flatulencies. These effects, however, are not to be expected from sauntering about, or lolling in a carriage; but from labour, or such active amusements as give exercise to every part of the body.

OF LOW SPIRITS.

All who have weak nerves are subject to low spirits in a greater or less degree. Generous diet, the cold bath, exercise, and amusements, are the most likely means to remove this complaint. It is greatly increased by solitude and indulging gloomy ideas, but may often be relieved by cheerful company and sprightly amusements.

When low spirits are owing to a weak relaxed state of the stomach and bowels, an infusion of the Peruvian bark with cinnamon or nutmeg will be proper. Steel joined with aromatics may likewise in this case be used with advantage; but riding, and a proper diet, are most to be depended on.

When they arise from a foulness of the stomach and intestines, or obstruction in the hypochondriac viscera, aloetic purges will be proper. I have sometimes known the Harrowgate waters of service in this case.

When low spirits proceed from a suppression of the menstrual or of the hæmorrhoidal flux, these evacuations may either be restored, or some other substituted in their place, as issues, setons, or the like. Dr. Whyte observes that nothing has such sudden good effects in this case as bleeding.

When low spirits have been brought on by long continued grief, anxiety, or other distresses of mind, agreeable company, variety of amusements, and change of place, especially travelling into foreign countries, will afford the most certain relief.

Persons afflicted with low spirits should avoid all kinds of excess, especially of venery and strong liquors. The immoderate use of wine and other strong liquors

is by no means hurtful; but when taken to excefs they weaken the ſtomach, vitiate the humours, and depreſs the ſpirits. This caution is the more neceſſary, as the unfortunate and melancholy often fly to ſtrong liquors for relief, by which means they never fail to participate their own deſtruction.

OF HYSTERIC AFFECTIONS.

Theſe likewiſe belong to the numerous tribe of nervous diſeaſes, which may be juſtly reckoned the reproach of medicine. Women of a delicate habit, whoſe ſtomach and inteſtines are relaxed, and whoſe nervous ſyſtem is extremely ſenſible, are moſt ſubject to hyſteric complaints. In ſuch perſons an hyſteric fit, as it is called, may be brought on by an irritation of the nerves of the ſtomach or inteſtines, by wind, acrid humour, or the like. A ſudden ſuppreſſion of the menſes often gives riſe to hyſteric fits. They may likewiſe be excited by violent paſſions or affections of the mind, as fear, grief, anger, or great diſappointments.

Sometimes the hyſteric fit reſembles a ſwoon or fainting fit, during which the patient lies as in a ſleep, only the breathing is ſo low as ſcarcely to be perceived;—at other times the patient is affected with catchings and ſtrong convulſions. The ſymptoms which precede hyſteric fits are likewiſe various in different perſons. Sometimes the fit comes on with coldneſs of the extremities, yawning and ſtretchings, lowneſs of ſpirits, oppreſſion and anxiety. At other times the approach of the fit is foretold by a feeling, as if there was a ball at the lower part of the belly, which gradually riſes towards the ſtomach, where it occaſions inflation, ſickneſs, and ſometimes vomiting; afterwards it riſes into the gullet, and occaſions a degree of ſuffocation to which quick breathing, palpitation of the heart, giddineſs of the head, dimneſs of the ſight, loſs of hearing, with convulſive motions of the extremities and other parts of the body, ſucceed. The hyſteric paroxyſm is often introduced by an immoderate fit of

laughter, and ſometimes it goes off by crying. Indeed there is not much difference between the laughing and crying of an hyſteric lady.

Our aim in the treatment of this diſeaſe muſt be to ſhorten the fit or paroxyſm when preſent, and to prevent its return. The longer the fit continue, and the more frequently they return, the diſeaſe becomes the more obſtinate. Their ſtrength is increaſed by habit, and they induce ſo great a relaxation of the ſyſtem, that it is with difficulty removed.

It is cuſtomary, during the hyſteric fits or paroxyſm, to bleed the patient. In ſtrong perſons of a plethoric habit, and where the pulſe is full, this may be proper, but in weak and delicate conſtitutions, or where the diſeaſe has been of long ſtanding, or ariſes from inanition, it is not ſafe. The beſt courſe in ſuch caſes is to rouſe the patient by ſtrong ſmells, as burnt feathers, aſafœtida, or ſpirits of hartſhorn held to the noſe. Hot bricks may alſo be applied to the ſoles of the feet, and the legs, arms, and belly may be ſtrongly rubbed with a warm cloth. But the beſt application is to put the feet and legs into warm water. This is peculiarly proper when the fits precede the flow of the menſes. In caſe of coſtiveneſs, a laxative clyſter with aſafœtida will be proper; and as ſoon as the patient can ſwallow, two table ſpoonfuls of a ſolution of aſafœtida, or of ſome cordial julep, may be often given †.

The radical cure of this diſorder will be beſt attempted at a time when the patient is moſt free from the fits. It will be greatly promoted by a proper attention to diet. A milk and vegetable diet, when duly perſiſted in, will often perform a cure. If, however, the pa-

† When hyſteric fits are occaſioned by ſympathy, they may be cured by exciting an oppoſite paſſion. This is ſaid to have been the caſe of a whole ſchool of young ladies in Holland, who were all cured by being told that the firſt who was ſeized ſhould be burnt to death. But this method of cure to my knowledge, will not always ſucceed. I would therefore adviſe, that young ladies who are ſubject to hyſteric fits ſhould not be ſent to boarding ſchools, as the diſeaſe may be caught by imitation. I have known madneſs itſelf brought on by ſympathy.

tient has been accuſtomed to a more generous diet, it will not be ſafe to leave it off all at once, but by degrees. The moſt proper drink is water with a ſmall quantity of ſpirits; a cool dry air is the beſt. Cold bathing and every thing that braces the nerves, and invigorates the ſyſtem is beneficial; but lying too long in bed, or whatever relaxes the body, is hurtful. It is of the greateſt importance to have the mind kept conſtantly eaſy and cheerful, and, if poſſible, to have it alway sengaged in ſome agreeable and intereſting purſuit.

The proper medicines are thoſe which ſtrengthen the alimentary canal and the whole nervous ſyſtem, as the preparations of iron, the Peruvian bark, and other bitters. Twenty drops of the elixir of vitriol, in a cup of the infuſion of the bark, may be taken twice or thrice a day. The bark and iron may likewiſe be taken in ſubſtance, provided the ſtomach can bear them; but they are generally given in too ſmall doſes to have any effect. The chalybeate waters generally prove beneficial in this diſorder.

If the ſtomach is loaded with phlegm viſcids will be of uſe; but they ſhould not be too ſtrong, nor frequently repeated, as they tend to relax and weaken the ſtomach. If there is a tendency to coſtiveneſs, it muſt be removed either by diet, or by taking an opening pill as it ſhall be found neceſſary.

To leſſen the irratibility of the ſyſtem, antiſpaſmodic medicines will be of uſe. The beſt antiſpaſmodic medicines are muſk, opium, and caſtor. When opium diſagrees with the ſtomach, it may either be applied externally, or given in clyſters. It is often ſucceſsful in removing thoſe periodical head achs to which hyſteric and hypochondriac patients are ſubject. Caſtor has in ſome caſes been found to procure ſleep where opium failed; for which reaſon Dr. Whyte adviſes that they ſhould be joined together. He likewiſe recommends the antihyſteric plaſter to be applied to the abdomen †.

† Though antispasmodics and anodynes are universally recommended in this disease, yet all the extraordinary cures that I ever

Hyſteric women are often afflicted with cramps in various parts of the body, which are moſt apt to ſeize them in bed, or when aſleep. The moſt efficacious medicines in this caſe are opium, bliſtering plaſters, and warm bathing or fomentations. When the cramp or ſpaſm is very violent, opium is the remedy moſt to be depended on. In milder caſes, immerſing the feet and legs in warm water, or applying a bliſtering plaſter to the part affected, will often be ſufficient to remove the complaint. In patients whoſe nerves are uncommonly delicate and ſenſible, it will be better to omit the bliſtering plaſter, and to attempt the cure by opiates, muſk, camphire, and the warm bath.

Cramps are often prevented or cured by compreſſion. Thus cramps in the legs are prevented, and ſometimes removed by tight bandage; and when convulſions ariſe from a flatulent diſtenſion of the inteſtines, or from ſpaſms beginning in them, they may be often leſſened or cured by making a pretty ſtrong compreſſion upon the abdomen by means of a broad belt. A roll of brimſtone held in the hand is frequently uſed as a remedy for cramps. Though this ſeems to owe its effect chiefly to imagination, yet as it ſometimes ſucceeds, it merits a trial †. When ſpaſms or convulſive motions ariſe from ſharp humours in the ſtomach or inteſtines, no laſting relief can be procured till theſe are either corrected or expelled. The Peruvian bark has ſometimes cured periodic convulſions after other medicines had failed.

OF HYPOCHONDRIAC AFFECTIONS.

This diſeaſe generally attacks the indolent, the luxurious, the unfortunate, and the ſtudious. It becomes daily more common in this country, owing, no doubt, to the increaſe of luxury and ſedentary employments.

knew in hyſteric caſes, were performed by means of tonic and corroborating medicines.

† Some perſons afflicted with cramps pretend to reap great benefit from ſmall bundles of roſemary tied all night about their feet, ancles, and knees.

It has ſo near a reſemblance to the immediately preceding, that many authors conſider them as the ſame diſeaſe, and treat them accordingly. They require, however, a very different regimen, and the ſymptoms of the latter, though leſs violent, are more permanent than thoſe of the former.

Men of melancholy temperaments, whoſe minds are capable of great attention, and whoſe paſſions are not eaſily moved, are in the advanced periods of life, moſt liable to this diſeaſe. It is uſually brought on by long and ſerious attention to abſtruſe ſubjects, grief, the ſuppreſſion of cuſtomary evacuations, exceſs of venery, the repulſion of cutaneous eruptions, long continued evacuations, obſtructions in ſome of the viſcera, as the liver, ſpleen, &c.

Hypochondriac perſons ought never to faſt long, and their food ſhould be ſolid and nouriſhing. All aceſcent and windy vegetables are to be avoided. Fleſh meats agree beſt with them, and their drink ſhould be old claret or good madeira. Should theſe diſagree with the ſtomach, water with a little brandy or rum in it may be drank.

Cheerfulneſs and ſerenity of mind are by all means to be cultivated. Exerciſe of every kind is uſeful. The cold bath is very beneficial, and where it does not agree with the patient, frictions with the fleſh bruſh or a coarſe cloth may be tried. If the patient has it in his power, he ought to travel either by ſea or land. A voyage or a long journey, eſpecially towards a warmer climate, will be of more ſervice than any medicine.

The general intentions of cure in this diſeaſe, are to ſtrengthen the alimentary canal, and to promote the ſecretions. Theſe intentions will be beſt anſwered by the different preparations of iron and the Peruvian bark, which, after proper evacuations, may be taken in the ſame manner as directed in the preceding diſeaſe.

If the patient be coſtive, it will be neceſſary to make uſe of ſome gentle opening medicine, as pills compoſed of equal parts of aloes, rhubarb and aſafœtida, with as much of the elixir proprietatis as is neceſſary to form the

ingredients into pills. Two, three, or four of these may be taken as often as it is found necessary to keep the body gently open. Such as cannot bear the asafœtida may substitute Spanish soap in its place.

Though a cheerful glass may have good effects in this disease, yet all manner of excess is hurtful. Intense study, and every thing that depresses the spirits, are likewise pernicious.

Though the general symptoms and treatment of nervous disorders were pointed out in the beginning of this Chapter, yet for the benefit of the unhappy persons afflicted with those obstinate and complicated maladies, I have treated several of their capital symptoms under distinct or separate heads. These, however, are not to be considered as different diseases, but as various modifications of the same disease. They all arise from the same general causes, and require nearly the same method of treatment. There are many other symptoms that merit particular attention, which the nature of my plan will not permit me to treat of at full length. I shall therefore omit them altogether, and conclude this Chapter with a few general remarks on the most obvious means of preventing or avoiding nervous disorders.

In all persons afflicted with nervous disorders, there is a great delicacy and sensibility of the whole system, and an uncommon degree of weakness of the organs of digestion. These may be either natural or acquired. When owing to a defect in the constitution, they are hardly to be removed, but may be mitigated by proper care. When induced by diseases, as long or repeated fevers, profuse hæmorrhages, or the like, they prove also very obstinate, and will yield only to a course of regimen calculated to restore and invigorate the habit.

But nervous affections arise more frequently from causes, which it is in a great measure in our power to avoid, than from diseases, or an original fault in the constitution, &c. Excessive grief, intense study, improper diet, and neglect of exercise, are the great sources of this extensive class of diseases.

It has been already obſerved, that grief indulged deſtroys the appetite and digeſtion, depreſſes the ſpirits, and induces an univerſal relaxation and debility of the whole ſyſtem. Inſtances of this are daily to be ſeen. The loſs of a near relation, or any other misfortune in life, is often ſufficient to occaſion the moſt complicated ſeries of nervous ſymptoms. Such misfortunes indeed are not to be avoided, but ſurely their effects, by a vigorous and proper exertion of the mind, might be rendered leſs hurtful. For directions in this matter, we muſt refer the reader to the article GRIEF, in the Chapter on the Paſſions.

The effects of intenſe ſtudy are pretty ſimilar to thoſe occaſioned by grief. It preys upon the animal ſpirits, and deſtroys the appetite and digeſtion. To prevent their effects, ſtudious perſons ought, according to the poet, "to toy with their books *." They ſhould never ſtudy too long at a time, nor attend long to one particular ſubject, eſpecially if it be of a ſerious nature. They ought likewiſe to be attentive to their poſture, and ſhould take care frequently to unbend their minds by muſic, diverſions, or going into agreeable company.

With regard to diet, I ſhall only obſerve, that nervous diſeaſes may be induced either by exceſs or inanition. Both of theſe extremes hurt the digeſtion, and vitiate the humours. When Nature is oppreſſed with freſh loads of food, before ſhe has had time to digeſt and aſſimilate the former meal, her powers are weakened, and the veſſels are filled with crude humours. On the other hand, when the food is not ſufficiently nouriſhing, or is taken too ſeldom, the bowels are inflated with wind, and the humours, for want of regular freſh ſupplies of wholeſome chyle, are vitiated. Theſe extremes are therefore with equal care to be avoided. They both tend to induce a relaxation and debility of the nervous ſyſtem, with all its dreadful train of conſequences.

* Armſtrong on Health.

But the moſt general cauſe of nervous diſorders is indolence. The active and laborious are ſeldom troubled with them. They are reſerved for the children of eaſe and affluence, who generally feel their keeneſt force. All we ſhould ſay to ſuch perſons is, that the means of prevention and cure are both in their own power. If the conſtitution of human nature be ſuch, that man muſt either labour or ſuffer diſeaſes, ſurely no individual has any right to expect an exemption from the general rule.

Thoſe, however, who are willing to take exerciſe, but whoſe occupations confine them to the houſe, and perhaps to an unfavourable poſture, really deſerve our pity. We have in a former part of the book endeavoured to lay down rules for their conduct; and ſhall only add, that where theſe cannot be complied with, their place may in ſome meaſure be ſupplied by the uſe of bracing and ſtrengthening medicines, as the Peruvian bark, with other bitters, the preparations of ſteel, the elixir of vitriol, &c.

In many caſes of the nervous kind, the ſymptoms of the diſorder are hardly to be deſcribed; they may be termed a mental agony, producing a laſſitude, reſtleſsneſs, and total incapacity of attending to any concerns of life. This medicine can hardly cure; a change of climate, and the variety of ſcenes and enjoyments which travelling procures, appears the only remedy in caſes of extremity.

CHAP. LXIV.

DISORDERS OF THE SENSES.

WE do not mean to treat of the nature of our ſenſations, or to give a minute deſcription of the various organs by which they are performed; but to point out ſome of the diſeaſes to which theſe organs are moſt liable, and to ſhow how they may be prevented or remedied.

OF THE EYE.

No organ of the body is ſubject to more diſeaſes than the eye; nor is there any one of which the diſeaſes are more difficult to cure. Though more ignorant perſons pretend to cure theſe than any other claſs of diſeaſes, yet a very ſuperficial acquaintance with the ſtructure of the eye, and the nature of viſion, will be ſufficient to convince any one of the danger of truſting to them. Theſe diſeaſes often exceed the skill of the moſt learned phyſician; hence we may eaſily infer the danger of truſting them to ignorant quacks, who, without all peradventure, put out more eyes than they cure. But though the diſeaſes of the eye can ſeldom be cured, they might often by due care be prevented; and even, where the ſight is totally loſt, many things might be done, which are generally neglected, to render the unhappy perſon both more uſeful to himſelf and to ſociety †.

The eyes are hurt by viewing bright or luminous objects, keeping the head too long in a hanging poſture, violent head achs, exceſſive venery, the long uſe of bitters, the effluvia from acrid or volatile ſubſtances, various diſeaſes, as the ſmall pox, meaſles, &c. but above all, from night watching, and candle light ſtudies. Long faſting is likewiſe hurtful to the eyes, and frequent heats and colds are no leſs pernicious. The eyes are often hurt by the ſtoppage of cuſtomary

† It is pity thoſe who have the misfortune to be born blind, or who lose their ſight when young, ſhould be ſuffered to remain in ignorance or to beg. This is both cruelty and want of economy. There are many employments of which blind perſons are very capable, as knitting, carding, turning a wheel, teaching languages, &c. Nor are inſtances wanting of perſons who have arrived at the higheſt pitch of learning, without having the leaſt idea of light. Witneſs the late famous Nicholas Sanderſon of Cambridge, and my worthy friend Dr. Thomas Blacklock of Edinburgh. The former was one of the firſt mathematicians of his age, and the latter, beſides being a good poet and philoſopher, was maſter of all the learned languages, and a very conſiderable adept in the liberal arts.

evacuations, as morning ſweats, ſweating of the feet, the menſes in women, and the bleeding piles in men. All kinds of exceſs are likewiſe hurtful to the ſight, particularly the immoderate uſe of ardent ſpirits, and other ſtrong liquors.

In all diſeaſes of the eyes, eſpecially thoſe attended with inflammation, the cool regimen ought to be obſerved. The patient muſt abſtain from all ſpirituous liquors. The ſmoke of tobacco, ſmoky rooms, the vapours of onions and garlic, and all vivid lights and glaring colours, are carefully to be avoided. The drink may be water whey, or ſmall beer, and the aliment muſt be light and of eaſy digeſtion.

For preventing diſorders of the eyes, iſſues and ſetons are of prime uſe. Every perſon, whoſe eyes are tender, ought to have one or more of theſe in ſome part of the body. It will likewiſe be of uſe to keep the body gently open, and either to bleed or purge every ſpring and fall. All exceſs and night ſtudies are to be avoided. Such as do not chuſe a ſeton or an iſſue, will reap benefit from wearing a ſmall Burgundy pitch plaſter between their ſhoulders.

A gutta ſerena, or amauroſis, is an abolition of the ſight, without any apparent cauſe or fault in the eyes. When it is owing to a decay or waſting of the optic nerve, it does not admit of a cure; but when it proceeds from a compreſſion of the nerves, by redundant humours, theſe may in ſome meaſure be drained off, and the patient relieved. For this purpoſe, the body muſt be kept open with the laxative mercurial pills. If the patient be young, and of a ſanguine habit, he may be bled. Cupping, with ſcarification on the back part of the head will likewiſe be of uſe. A running at the noſe may be promoted by volatile ſalts, ſtimulating powders, &c. But the moſt likely means for relieving the patient are iſſues or bliſters kept open for a long time on the back part of the head, behind the ears, or on the neck. I have known theſe reſtore ſight, even after it had been for a conſiderable time loſt.

Should theſe fail, recourſe muſt be had to a mercu-

rial ſalivation; or, what will perhaps anſwer the purpoſe better, twelve grains of the corroſive ſublimate of mercury may be diſſolved in an Engliſh pint and a half of brandy, and a table ſpoonful of it taken twice a day, drinking half a pint of the decoction of ſarſaparilla after it.

A *cataract* is an obſtruction of the pupil, by the interpoſition of ſome opaque ſubſtance which either diminiſhes or totally extinguiſhes the ſight. It is generally an opacity of the cryſtalline humour. In a recent or beginning cataract, the ſame medicines are to be uſed as in the gutta ſerena, and they will ſometimes ſucceed. But when this does not happen, and the cataract becomes firm, it muſt be couched, or rather extracted. I have reſolved a recent cataract by giving the patient frequent purges with calomel, keeping a poultice of freſh hemlock conſtantly on the eye, and a perpetual bliſter on the neck.

The *myopia*, or ſhort ſightedneſs, and the *presbopia*, or ſeeing only at too great a diſtance, are diſorders which depend on the original figure or ſtructure of the eye, therefore admit of no cure. The inconveniences ariſing from them may, however, be in ſome meaſure remedied by the help of proper glaſſes. The former requires the aid of a concave, and the latter of a convex glaſs.

A *ſtrabiſmus*, or ſquinting, depends upon an irregular contraction of the muſcle of the eye from a ſpaſm, palſy, epilepſy, or an ill habit. Children often contract this diſorder by having their eyes unequally expoſed to the light. They may likewiſe be acquired by imitation from a ſquinting nurſe or play fellow, &c. As this diſorder can hardly be cured, parents ought to be careful to prevent it. Almoſt the only thing which can be done for it is to contrive a maſk for the child to wear, which will only permit him to ſee in a ſtraight direction.

Spots or ſpecks on the eyes are generally the effect of inflammation, and often appear after the ſmall pox, the meaſles, or violent ophthalmias. They are very difficult

to cure, and often occaſion total blindneſs. If the ſpecks are ſoft and thin, they may ſometimes be taken off by gentle cauſtics and diſcutients; as vitriol, the juice of celandine, &c. When theſe do not ſucceed, a ſurgical operation may be tried; the ſucceſs of this, however, is always very doubtful.

The *blood-ſhot* eye may be occaſioned by a ſtroke, a fall, retching, vomiting, violent coughing, &c. I have frequently known it happen to children in the hooping cough. It appears at firſt like a bit of ſcarlet, and is afterwards of a livid or blackiſh colour. This diſorder generally goes off without medicine. Should it prove obſtinate, the patient may be bled, and have his eyes fomented with a decoction of comphry roots and elder flowers. A ſoft poultice may be applied to the eyes; and the body ſhould be kept open by gentle purgatives.

The *watery* or *weeping eye* is generally occaſioned by a relaxation or weakneſs of the glandular parts of that organ. Theſe may be braced and ſtrengthened by bathing the eye with brandy and water, Hungary-water, roſe-water, with white vitriol diſſolved in it, &c. Medicines which have a revulſion are likewiſe proper; as mild purgatives, perpetual bliſters on the neck, bathing the feet frequently with lukewarm water, &c.

When this diſeaſe proceeds from an obſtruction of the lachrymal duct, or natural paſſage of the tears, it is called a *fiſtula lachrymalis*, and can only be cured by a ſurgical operation.

OF THE EAR.

The functions of the ear may be injured by wounds, ulcers, or any thing that hurts its fabic. The hearing may likewiſe be hurt by exceſſive noiſe, violent colds in the head; fevers; hard wax or other ſubſtances ſticking in the cavity of the ear. Deafneſs is very often the effect of old age, and is incident to moſt people in the decline of life. Sometimes it is owing to an original fault in the ſtructure or formation of the ear itſelf. When this is the caſe, it admits no cure; and the un-

happy perſon not only continues deaf, but generally likewiſe dumb for life *.

When deafneſs is the effect of wounds or ulcers of the ears, or of old age, it is not eaſily removed. When it proceeds from cold of the head, the patient muſt be careful to keep his head warm, eſpecially in the night; he ſhould likewiſe take ſome gentle purges, and keep his feet warm, and bathe them frequently in lukewarm water at bed time. When deafneſs is the effect of a fever, it generally goes off after the patient recovers. If it proceeds from dry wax ſticking in the ears, it may be ſoftened by dropping oil into them; afterwards they may be ſyringed with warm milk and water.

If deafneſs proceds from dryneſs of the ears, which may be known by looking into them, half an ounce of the oil of ſweet almonds, and the ſame quantity of liquid opodeldoch, or tincture of aſafœtida, may be mixed together, and a few drops of it put into the ear every

* Though those who have the misfortune to be born deaf are generally suffered to continue dumb, and consequently are in a great measure lost to society, yet nothing is more certain than that such persons may be taught not only to read and write, but also to speak, and to understand what others say to them. Teaching the dumb to speak, will appear paradoxical to those who do not consider that the formation of sounds is merely mechanical, and may be taught without the assistance of the ear. This is not only capable of demonstration, but is actually reduced to practice by the ingenious Mr. Thomas Braidwood of Edinburgh. This gentleman has, by the mere force of genius and application, brought the teaching of dumb persons to such a degree of perfection, that his scholars are generally more forward in their education, than those of the same age who enjoy all their faculties. They not only read and write with the utmost readiness, but likewise speak, and are capable of holding conversation with any person in the light. What a pity any of the human species should remain in a state of idiotism, who are capable of being rendered as useful and intelligent as others! We mention this not only from humanity to those who have the misfortune to be born deaf, but also in justice to Mr. Braidwood, whose success has far exceeded all former attempts this way; and indeed it exceeds imagination itself so far, that no person who has not seen and examined his pupils, can believe what they are capable of.—As this gentleman, however willing, is only to teach a few, and as the far greater part of those who are born deaf cannot afford to attend him, it would be an act of great humanity, as well as public utility, to erect an academy for their benefit.

night at bed time, ſtopping them afterwards with a little wool or cotton. Some, inſtead of oil, put a ſmall ſlice of fat bacon into each ear, which is ſaid to anſwer the purpoſe very well. When the ears abound with moiſture, it may be drained off by an iſſue or ſeton, which ſhould me made as near the affected parts as poſſible.

Some, for the cure of deafneſs recommend the gall of an eel mixed with ſpirit of wine, to be dropped into the ear; others, equal parts of Hungary water and ſpirit of lavender. Etmuller extols amber and muſk; and Brookes ſays, he has often known hardneſs of hearing cured by putting a grain or two of muſk into the ear with cotton wool. But theſe and other applications muſt be varied according to the cauſe of the diſorder *.

Though ſuch applications may ſometimes be of ſervice, yet they much oftener fail, and frequently they do hurt. Neither the eyes nor ears ought to be tampered with; they are tender organs, and require a very delicate touch. For this reaſon, what we would chiefly recommend in deafneſs is to keep the head warm. From whatever cauſe the diſorder proceeds, this is always proper; and I have known much benefit from it alone, in the moſt obſtinate caſes of deafneſs, than from all the medicines I ever uſed.

OF THE TASTE AND SMELL.

Though theſe ſenſes are not of ſo great importance to man in a ſtate of ſociety as the ſight and hearing, yet as the loſs of them is attended with ſome inconveniency, they deſerve our notice. They are ſeldom to be reſtored when loſt, which ought to make us very attentive to their preſervation, by carefully avoiding

* A gentleman on whose veracity I can depend told me, that after using many things to no purpose for an obstinate deafness, he was at last advised to put a few drops of his own urine warm into his ears every night and morning, from which he received great benefit. It is probable, that a solution of sal ammoniac, in water, would produce the same effect.

whatever may in the leaſt prove injurious to them. As there is a very great affinity between the organs of taſting and ſmelling, whatever hurts the one generally affects the other.

Luxury is highly injurious to theſe organs. When the noſe and palate are frequently ſtimulated by fragrant and poignant diſhes, they ſoon loſe the power of diſtinguiſhing taſtes and odours with any degree of nicety. Man in a ſtate of Nature may perhaps have theſe faculties as acute as any other animal.

The ſenſe of ſmelling may be diminiſhed or deſtoyed by diſeaſes; as the moiſture, dryneſs, inflammation, or ſuppuration of that membrane, which lines the inſide of the noſe, commonly called the olfactory membrane; the compreſſion of the nerves which ſupply this membrane, or ſome fault of the brain itſelf at their origin. A defect, or too great a degree of ſolidity, of the ſmall ſpungy bones of the upper jaw, the caverns of the forehead, &c. may likewiſe impair the ſenſe of ſmelling. It may alſo be injured by a collection of fœtid matter in thoſe caverns, which keeps conſtantly exhaling from them. Few things are more hurtful to the ſenſe of ſmelling than taking great quantities of ſnuff.

When the noſe abounds with moiſture, after gentle evacuations, ſuch things as tend to take off irritation, and coagulate the ſharp ſerum, may be applied; as the oil of aniſeed mixed with fine flour, camphire diſſolved in oil of almonds, &c. The vapours of amber, frankincenſe, gum maſtich, and benjamin, may likewiſe be received into the noſe and mouth.

For moiſtening the mucus when it is too dry, ſome recommend ſnuff made of the leaves of marjoram, mixed with the oil of amber, marjoram, and aniſeed; or a ſternutatory of calcined white vitriol; twelve grains of which may be mixed with two ounces of marjoram water, and filtrated. The ſteam or vapour of vinegar upon hot iron, received up the noſtrils, is likewiſe of uſe for ſoftening the mucus, opening obſtructions, &c.

If there be an ulcer in the noſe, it ought to be dreſſed with ſome emollient ointment, to which, if the pain be very great, a little laudanum may be added. If it be a venereal ulcer, it is not to be cured without mercury. In this caſe, the ſolution of the corroſive ſublimate in brandy may be taken, as directed in the gutta ſerena. The ulcer ought likewiſe to be waſhed with it, and the fumes of cinnabar may be received up the noſtrils.

If there be reaſon to ſuſpect that the nerves which ſupply the organs of ſmelling are inert, or want ſtimulating, volatile ſalts, ſtrong ſnuffs, and other things which occaſion ſneezing, may be applied to the noſe. The forehead may likewiſe be anointed with balſam of Peru, to which may be added a little of the oil of amber.

The taſte may be diminiſhed by cruſts, filth, mucus, apthæ, pellicles, warts, &c. covering the tongue. It may be depraved by a fault of the ſaliva, which being diſcharged into the mouth, gives the ſame ſenſations as if the food which the perſon takes had really a bad taſte; or it may be entirely deſtroyed by injuries done to the nerves of the tongue and palate. Few things prove more hurtful either to the ſenſe of taſte or ſmelling, than obſtinate colds, eſpecially thoſe which affect the head.

When the taſte is diminiſhed by filth, mucus, &c. the tongue ought to be ſcraped, and frequently waſhed with a mixture of water, vinegar, and honey, or ſome other detergent. When the ſaliva is vitiated, which ſeldom happens, unleſs in fevers or other diſeaſes, the curing of the diſorder is the cure of this ſymptom. To relieve it, however, in the mean time, the following things may be of uſe; if there be a bitter taſte, it may be taken away by vomits, purges, and other things which evacuate bile. What is called a nidorous taſte, ariſing from nidorous humours, is corrected by the juice of citrons, oranges, and other acids. A ſalt taſte is cured by a plentiful dilution with watery liquors. An acid taſte is deſtroyed by abſorbents, and alkaline

ſalts, as powder of oyſter ſhells, ſalt of wormwood, &c.

When the ſenſibility of the nerves, which ſupply the organs of taſte, is diminiſhed, the chewing of horſe-radiſh, or other ſtimulating ſubſtances, will help to recover it.

OF THE TOUCH.

The ſenſe of touching may be hurt by any thing that obſtructs the nervous influence, or prevents its being regularly conveyed to the organs of touching; as preſſure, extreme cold, &c. It may likewiſe be hurt by too great a degree of ſenſibility, when the nerve is not ſufficietly covered by the cuticle or ſcarf ſkin, or where there is to too great a tenſion of it, or it is too delicate. Whatever diſorders the functions of the brain and nerves, hurts the ſenſe of touching. Hence it appears to proceed from the ſame general cauſes as palſy and apoplexy, and requires nearly the ſame method of treatment.

In a ſtupor, or defect of touching, which ariſes from an obſtruction of the cutaneous nerves, the patient muſt firſt be purged; afterwards ſuch medicines as excite the action of the nerves, or ſtimulate the ſyſtem, may be uſed. For this purpoſe, the ſpirits of hartſhorn, ſal volatile oleoſum, horſe radiſh, &c. may be taken inwardly; the diſordered parts at the ſame time may be frequently rubbed with nettles, or ſpirit of ſal ammoniac. Bliſtering plaſters and ſinapiſms applied to the parts will likewiſe be of uſe, as alſo warm bathing, eſpecially in the natural hot baths.

The greateſt relaxer of the nervous ſyſtem, and what blunts every ſenſe in the ſtrongeſt degree, is intemperance; a drunkard may be literally ſaid to have loſt his ſenſes, and even when they return, every debauch increaſes the debility, till at length there enſue blindneſs, diſeaſe, and death. Exceſs in eating is no leſs injurious, it deſtroys the taſte and ſmell; thus defeating the purpoſes of two uſeful ſenſes.

Want of cleanlineſs is likewiſe very uſeful to the

rgans of ſenſation, and this evil being in every per-
on's power to remedy, there is no excuſe for it. Na-
ure has wiſely guarded the extremities of the nerves,
he interior part of the noſe, the eyes, the ear, the
nouth, from all external annoyance, and permitted the
neans, without man's will, of relieving theſe delicate
rgans from impurities; and ſhall we be ſo ſhamefully
azy as to refuſe the aſſiſtance of a very eaſy manual
abour, with a little ſoap and water, to prevent the
lirtineſs of our ſkin, and prevent every inconvenience?
Is it too much trouble to dip the face, with the eyes
open, four or five times every morning, to waſh the
ears, to rince the noſe, and by a proper and temperate
diet to keep the tongue clean? Theſe ſimple things,
properly attended to, will be found more conducive
to health than a whole Materia Medica.

CHAP. XLV.

OF A SCHIRRUS AND CANCER.

A Schirrus is a hard indolent tumour, generally ſeated in ſome of the glands; as the breaſt, the arm pits, &c. If the tumour becomes large, unequal, of a livid, blackiſh, or leaden colour, and is attended with violent pain, it gets the name of an occult cancer. When the skin is broken, and a ſanies or ichorous matter of an abominable fœtid ſmell is diſcharged from the ſore, it is called an open or ulcerated cancer. Perſons after the age of forty five, particularly women, and thoſe who lead an indolent ſedentary life, are moſt ſubject to this diſeaſe.

CAUSES.—This diſeaſe is often owing to ſuppreſſed evacuations; hence it proves ſo frequently fatal to women of a groſs habit, particularly old maids and widows, about the time when the menſtrual flux ceaſes. It may likewiſe be occaſioned by exceſſive fear, grief, anger, religious melancholy, or any of the depreſſing paſſions. Hence the unfortunate, choleric, and

thoſe perſons who devote themſelves to a religious life in convents or monaſteries, are often afflicted with it. It may alſo be occaſioned by the long continued uſe of food that is too hard of digeſtion, or of an acrid nature; by barrenneſs, celibacy, indolence, cold, blows, friction, preſſure, or the like. Women often ſuffer from the laſt of theſe by means of their ſtays, which ſqueeze and compreſs their breaſt, ſo as to occaſion great miſchief. Sometimes the diſeaſe is owing to an hereditary diſpoſition.

SYMPTOMS.—This diſorder ſeems often very trifling at the the beginning;—a hard tumour about the ſize of a hazel nut, or perhaps ſmaller, is generally the firſt ſymptoms. This will often continue for a long time without ſeeming to increaſe, or giving the patient great uneaſineſs; but if the conſtitution be hurt, or the tumour irritated by preſſure, or improper treatment of any kind, it begins to extend itſelf towards the neighbouring parts, by puſhing out a kind of roots or limbs. It then gets the name of *cancer*, from a fancied reſemblance between theſe limbs and the claws of a crab. The colour of the skin begins to change, which is firſt red, afterwards purple, then bluiſh, livid, and at laſt black. The patient complains of heat, with a burning, gnawing, ſhooting, pain. The tumour is very hard, rough, and unequal, with a protuberance or riſing in the middle; its ſize increaſes daily, and the neighbouring veins become thick, knotty, and of a blackiſh colour.

The ſkin at length gives way, and a thin ſharp ichor begins to flow, which corrodes the neighbouring parts, till it forms a large unſightly ulcer. More occult cancers ariſe, and communicate with the neighbouring glands. The pain and ſtench become intolerable; the appetite fails; the ſtrength is exhauſted by a continual hectic fever; at laſt, a violent hæmorrhage or diſcharge of blood from ſome part of body, with faintings or convulſion fits, generally put an end to the miſerable patient's life.

REGIMEN.—The diet ought to be light, but nouriſhing. All ſtrong liquors, and high ſeaſoned or ſalted

provisions are to be avoided. The patient may take as much exercise as he can easily bear, and should use every method to divert thought, and amuse his fancy. All kinds of external injury are carefully to be guarded against, particularly of the affected part, which ought to be defended from all pressure, and even from the external air, by covering it with fur or soft flannel.

MEDICINE.——This is one of those diseases for which no certain remedy is yet known. Its progress, however, may sometimes be retarded, and some of its most disagreeable symptoms mitigated, by proper applications. One misfortune attending the disease is that the unhappy patient often conceals it too long. Were proper means used in due time, a cancer might often be stopped; but after the disorder has arrived at a certain height, it generally sets all medicine at defiance.

When a schirrus tumour is first discovered, the patient ought to observe a proper regimen, and to take twice or thrice a week a dose of the common purging mercurial pills. Some blood may also be let, and the part affected may be gently rubbed twice a day, with a little of the mercurial ointment, and kept warm with fur or flannel. The food must be light, and an English pint of the decoction of woods or sarsaparilla may be drank daily. I have sometimes discussed hard tumours, which had the appearance of being cancers, by a course of this kind.

Should the tumour, however, not yield to this treatment, but on the contrary become larger and harder, it will be proper to extirpate it, either by the knife or caustic. Indeed, whenever this can be done with safety, the sooner it is done the better. It can answer no purpose to extirpate a cancer after the constitution is ruined, or the whole mass of humours corrupted by it. This however is the common way, which makes the operation so seldom succeed. Few people will submit to the extirpation till death stares them in the face; whereas if it were done early, the patient's life would

not be endangered by the operation, and it would generally prove a radical cure.

When the cancer is ſo ſituated that it cannot be cut off, or if the patient will not ſubmit to the operation; ſuch medicines as will mitigate or relieve the moſt urgent ſymptoms may be uſed. Dr. Home ſays, that half a grain of the corroſive ſublimate of mercury, diſſolved in a proper quantity of brandy, and taken night and morning, will often be of ſervice in cancers of the face and noſe. He likewiſe recommends an infuſion of the ſolanum, or nightſhade, in cancers of the breaſts.

But the medicine moſt in repute at preſent for this diſeaſe is hemlock. Dr. Stock, phyſician at Vienna, has of late recommended the extract of this plant as very efficacious in cancers of every kind. The doctor ſays, he has given ſome hundred weights of it without ever hurting any body, and often with manifeſt advantage. He adviſes the patient, however, to begin with very ſmall doſes, as two or three grains, and to increaſe the doſe gradually till ſome good effect be perceived, and there to reſt without further increaſe. From two or three grains at firſt, the doctor ſays he has increaſed the doſe to two, three, or four drachms a day, and finds that ſuch doſes may be continued for ſeveral weeks, without any bad conſequences.

The regimen which the doctor recommends during the uſe of the medicine, is to avoid farinaceous ſubſtances not fermented, and too acrid aromatics. He ſays, good wine will not be hurtful to thoſe who are accuſtomed to it, nor a moderate uſe of acids, and adds, that the patient ſhould live in a pure free air, and keep his mind as quiet and cheerful as poſſible.

The doctor does not pretend to fix the time in which a cancer may be reſolved by the uſe of hemlock, but ſays he has given it for above two years in large doſes without any apparent benefit, nevertheleſs the patient has been cured by perſiſting in the uſe of it for half a year longer. This is at leaſt encouragement to give it a fair trial. Though we are far from thinking the hemlock merits thoſe extravagant encomiums which the doctor has be-

ſtowed upon it, yet, in a diſeaſe which has ſo long baffled the boaſted powers of medicine, we think it ought always to be tried.

The powder of hemlock is by ſome preferred to the extract; they are both made of the freſh leaves, and may be uſed nearly in the ſame manner. Dr. Nicholſon of Berwick ſays, he gradually increaſed the doſe of the powder from a few grains to half a drachm, and gave near four drachms of it in the day with remarkably good effects. The hemlock may alſo be uſed externally either as a poultice or fomentation. The ſore may likewiſe be kept clean by injecting daily a ſtrong decoction of the tops and leaves into it.

Few things contribute more to the healing of foul ſordid ulcers of any kind than keeping them thoroughly clean. This ought never to be neglected. The beſt application for this purpoſe ſeems to be the carrot poultice. The root of the common carrot may be grated and moiſtened with as much water as will bring it to the conſiſtence of a poultice or cataplaſm. This muſt be applied to the ſore and renewed twice a-day. It generally clears the ſore, eaſes the pain, and takes away the diſagreeable ſmell, which are objects of no ſmall importance in ſuch a dreadful diſorder *.

Wort, or an infuſion of malt, has been recommended not only as a powerful drink, but as a powerful medicine in this diſeaſe. It muſt be frequently made freſh, and the patient may take it at pleaſure. Two, three, or even four Engliſh pints of it may be drank every day for a conſiderable time. No benefit can be expected from any medicine in this diſeaſe unleſs it be perſiſted in for a long time. It is of too obſtinate a nature to be ſoon removed, and when it admits of a cure at all, it muſt be brought about by inducing an almoſt total change of the habit, which muſt always be a work of time. Setons or iſſues in the neighbourhood of the cancer have ſometimes good effects †.

* London Medical Essays.

† In a cancer which had set all medicine, and even surgery, at defiance, I lately saw remarkable effects from an obstinate perseve-

When all other medicines fail, recourſe muſt be had to opium, as a kind of ſolace. This will not indeed cure the diſeaſe, but it will eaſe the patient's agony, and render life more tolerable while it continues.

To avoid this dreadful diſorder people ought to uſe wholeſome food, to take ſufficient exerciſe in the open air, to be as eaſy and cheerful as poſſible, and carefully to guard againſt all blows, bruiſes, and every kind of preſſure upon the breaſts or other glandular parts †.

The cancer is equally a loathſome and painful diſeaſe; it kills by inches, and can ſeldom be cured but by cutting; and even that remedy is not always certain. Tumours in the breaſt, which might have turned to cancers, have been cured by the camphorated mercurial ointment, applied twice a-day, but after the ſchirrus has broke, it will yield to no remedy, not even the boaſted ſpecifics of quackery. Theſe never-failing cures of diſorder generally ſend their patients to the grave, as a complete and final remedy for every diſeaſe.

ance in a course of antisceptics. I ordered the deep ulcers to be washed to the bottom by means of a syringe, twice or thrice a day, either by an infusion of the bark or a decoction of carrot, and that the patient should take four or five times a day a glass of good wine, with half a drachm of the best powdered bark in it. The sores, after being washed, were likewise sprinkled with the same powder. When the patient began this course, her death was daily expected. She continued it for about two years with manifestest advantage; but being told by an eminent surgeon, that the bark would not cure the cancer, and that the sores ought not to be washed, she discontinued the practice, and died in a few weeks. This course was not intended to cure the cancer, but to prolong the patient's life, which it evidently did, almost to a miracle.

† As hemlock is the principal medicine recommended in this disease, we would have given some directions for the gathering and preparing of that plant; but as its different preparations are now kept in the shops, we think it much safer for people to get them there, with proper directions for using them.

CHAP. XXI.

OF POISONS.

EVERY perſon ought, in ſome meaſure, to be acquainted with the nature and cure of poiſons. They are generally taken unawares, and their effects are often to ſudden and violent as not to admit of delay, or allow time to procure the aſſiſtance of phyſicians. Happily, indeed, no great degree of medical knowledge is neceſſary, the remedies for moſt poiſons being generally at hand, or eaſily obtained, and nothing but common prudence needful in the application of them.

The vulgar notion that every poiſon is cured by ſome counter poiſon, as a ſpecific, has done much hurt. People believe they can do nothing for the patient, unleſs they know the particular antidote to that kind of poiſon which he has taken. Whereas the cure of all poiſon taken into the ſtomach without exception, depends chiefly on diſcharging them as ſoon as poſſible.

There is no caſe wherein the indications of cure are more obvious. Poiſon is ſeldom long on the ſtomach before it occaſions ſickneſs, with an inclination to vomit. This ſhews plainly what ought to be done. Indeed common ſenſe dictates to every one, that if any thing has been taken into the ſtomach which endangers life, it ought immediately to be diſcharged. Were this duly regarded, the dangers ariſing from poiſons might generally be avoided. The method of prevention is obvious, and the means are in the hands of every one.

We ſhall not take up the reader's time with a detail of the ridiculous notions which have prevailed among ignorant people in different ages with regard to poiſons; neither ſhall we mention the boaſted antidotes which have been recommended either for preventing

or obviating their effects; but ſhall content ourſelves with pointing out the poiſons moſt common in this country, and the means of avoiding their dangerous conſequences.

Poiſons either belong to the mineral, the vegetable, or the animal kingdom.

Mineral poiſons are commonly of an acrid or corroſive quality; as arſenic, cobalt, the corroſive ſublimate of mercury, &c.

Thoſe of the vegetable kind are generally of a narcotic or ſtupefactive quality; as poppy, hemlock, henbane, berries of the deadly night ſhade, &c.

Poiſonous animals communicate their infection either by the bite or ſting. The poiſon is very different from the former, and only produces its effects when received into the body by a wound.

MINERAL POISONS.—Arſenic is the moſt common of this claſs; as the whole of them are pretty ſimilar, both in their effects and method of cure, what is ſaid with reſpect to it will be applicable to every other ſpecies of corroſive poiſon.

When a perſon has taken arſenic, he ſoon perceives a burning heat, and a violent pricking pain in his ſtomach and bowels, with an intolerable thirſt, and an inclination to vomit. The tongue and throat feel rough and dry, and if proper means be not ſoon adminiſtered, the patient is ſeized with great anxiety, hiccupping, faintings, and coldneſs of the extremities. To theſe ſucceed black vomits, fœtid ſtools, with a mortification of the ſtomach and inteſtines, which are the immediate forerunners of death.

On the firſt appearance of theſe ſymptoms the patient ſhould drink large quantities of new milk and ſalad oil till he vomits; or he may drink warm water mixed with oil. Fat broths are likewiſe proper, provided they can be got ready in time. Where no oil is to be had, freſh butter may be melted and mixed with the milk and water. Theſe things are to be drank as long as the inclination to vomit continues. Some have drank eight or ten Engliſh quarts before the vomiting

eaſed; and it is never ſafe to leave off drinking while ne particle of the poiſon remains in the ſtomach.

Theſe oily or fat ſubſtances not only provoke vo-iiting, but likewiſe blunt the acrimony of the poiſon, nd prevent its wounding the bowels; but if they ıould not make the perſon vomit, half a drachm or wo ſcruples of powder of ipecacuanha muſt be given, r a few ſpoonfuls of the oxymel or vinegar of ſquills nay be mixed with water which he drinks. Vomiting nay likewiſe be excited by tickling the inſide of the hroat with a feather. Should theſe methods, however, ail, half a drachm of white vitriol, or five or ſix rains of emetic tartar, muſt be adminiſtered.

If tormenting pains are felt in the lower belly, and here is reaſon to fear that the poiſon has got down to he inteſtines, clyſters of milk and oil muſt be very requently thrown up, and the patient muſt drink emol-ient decoctions of barley, oatmeal, marſhmallows, and uch like. He muſt likewiſe take an infuſion of ſenna nd manna, a ſolution of Glauber's ſalts, or ſome other ourgative.

After the poiſon has been evacuated, the patient ought for ſome time to live upon ſuch things as are of a healing and cooling quality; to abſtain from fleſh and all ſtrong liquors, and to live upon milk, broth, gruel, light puddings, and other ſpoon meats of eaſy digeſtion. His drink ſhould be barley water, linſeed tea, or infu-ſions of any of the mild mucilaginous vegetables.

VEGETABLE POISONS, beſides heat and pain of the ſtomach, commonly occaſion ſome degree of giddi-neſs, and often a kind of ſtupidity or folly. Perſons who have taken theſe poiſons muſt be treated in the ſame manner as for the mineral or corroſive.

Though the vegetable poiſons, when allowed to re-main in the ſtomach, often prove fatal, yet the danger is generally over as ſoon as they are diſcharged. Not being of ſuch a cauſtic or corroſive nature, they are leſs apt to wound or inflame the bowels than mineral ſubſtances. No, time, however, ought to be loſt in hav-ing them diſcharged.

Opium, being frequently taken by miſtake, merits particular attention. It is uſed as a medicine both in a ſolid and liquid form, which latter commonly goes by the name of laudanum. It is, indeed, a valuable medicine when taken in proper quantity; but as an overdoſe proves a ſtrong poiſon, we ſhall point out its common effects, together with the method of cure.

An over doſe of opium generally occaſions great drowſineſs, with ſtupor and other apoplectic ſymptoms. Sometimes the perſon has ſo great an inclination to ſleep that it is almoſt impoſſible to keep him awake. Every method, however, muſt be tried for this purpoſe. He ſhould be toſſed, ſhaked, and moved about. Sharp bliſtering plaſters ſhould be applied to his legs or arms, and ſtimulating medicines, as ſalts of hartſhorn, &c. held under his noſe. It will alſo be proper to let blood; at the ſame time every method muſt be taken to make him diſcharge the poiſon. This may be done in the manner directed above, viz. by the uſe of ſtrong vomits, drinking plenty of warm water, with oil, &c.

Mead, beſides vomits, in this caſe recommends acid medicines with lixivial ſalts. He ſays, that he has often given ſalt of wormwood mixed with juice of lemons in repeated doſes with great ſucceſs.

If the body ſhould remain weak and languid after the poiſon has been diſcharged, nouriſhing diet and cordials will be proper; but when there is reaſon to fear the ſtomach or bowels are inflamed, the greateſt circumſpection is neceſſary, both with regard to food and medicine.

OF THE BITES OF POISONOUS ANIMALS.

We ſhall begin with the bite of a mad dog, as it is both the moſt common and dangerous animal poiſon in this country.

The creatures naturally liable to contract this diſeaſe are, as far as we yet know, all of the dog kind, viz. foxes, dogs and wolves. Hence it is called the rabies canina,

r dog madness. Of the laſt we have none in this iſland; nd it ſo ſeldom happens that any perſon is bit by the rſt, that they ſcarce deſerve to be taken notice of. If uch a thing ſhould happen, the method of treatment ; preciſely the ſame as for a bite of a mad dog.

The ſymptoms of madneſs in a dog are as follow; at irſt he looks dull, ſhews an averſion to food and com- pany; he does not bark as uſual, but ſeems to murmur, s peeviſh, and apt to bite ſtrangers; his ears and tail roop more than uſual, and he appears drowſy; after- wards he begins to loll out his tongue, and froth at the mouth, his eye ſeeming heavy and watery; he now, if not confined, takes off, runs panting along with a kind of dejected air, and endeavours to bite every one he meets. Other dogs are ſaid to fly from him. Some think this a certain ſign of madneſs, ſuppoſing that they know him by the ſmell; but is it not to be depended on. If he eſcapes being killed, he ſeldom runs above two or three days, till he dies exhauſted with heat, hunger and fatigue.

This diſeaſe is moſt frequent after long, dry, hot, ſeaſons; and ſuch dogs as live upon putrid ſtinking car- rion, without having enough of freſh water, are moſt liable to it.

When any perſon has been bit by a dog, the ſtricteſt inquiry ought to be made whether the animal was real- ly mad. Many diſagreeable conſequences ariſe from neglecting to aſcertain this point. Some people have lived in continual anxiety for many years, becauſe they had been bit by a dog which they believed to be mad; but, as he had been killed on the ſpot, it was impoſſible to aſcertain the fact. This ſhould induce us, inſtead of killing the dog the moment he has bit any perſon, to do all in our power to keep him alive, at leaſt till we can be certain whether he be mad or not.

Many circumſtances may contribute to make people imagine a dog mad. He loſes his maſter, runs about in queſt of him, is ſet upon by other dogs, and perhaps by men. The creature thus frightened, beat and abuſed, looks wild, and lolls out his tongue as he runs along.

Immediately a crowd is after him, while he, finding himſelf cloſely purſued, and taking every one he meets for an enemy, naturally attempts to bite him in ſelf defence. He ſoon gets knocked on the head, and it paſſes currently that he was mad, and it is then impoſſible to prove the contrary.

This being the true hiſtory of by far the greater part of thoſe dogs who paſs for mad, is it any wonder that numberleſs whimſical medicines have been extolled for preventing the effects of their bite? This readily accounts for the great variety of infallible remedies for the bite of a mad dog, which are to be met with in almoſt every family. Though not one in a thouſand has any claim to merit, yet they are all ſupported by numberleſs vouchers. No wonder then imaginary diſeaſes ſhould be cured by imaginary remedies. In this way credulous people firſt impoſe upon themſelves, and then deceive others. The ſame medicine which was ſuppoſed to prevent the effects of the bite, when the dog was not mad, is recommended to a perſon who has had the misfortune to be bit by a dog that was really mad. He takes it, truſts to it, and is undone.

To theſe miſtakes we muſt impute the frequent ill ſucceſs of the medicines uſed for preventing the effects of the bite of a mad dog. It is not owing ſo much to a defect in medicine, as to wrong applications. I am perſuaded, if proper medicines were adminiſtered immediately after the bite is received, and continued for a ſufficient length of time, we ſhould not loſe one in a thouſand of thoſe who have the misfortune to be bit by a mad dog.

This poiſon is generally communicated by a wound, which nevertheleſs heals as ſoon as a common wound; but afterwards it begins to feel painful, and as the pain ſpreads towards the neighbouring parts, the perſon then becomes heavy and liſtleſs. His ſleep is unquiet, with frightful dreams; he ſighs, looks dull, and loves ſolitude. Theſe are the forerunners, or rather the firſt ſymptoms, of that dreadful diſeaſe occaſioned by the bite of a mad dog. But as we do not propoſe to treat fully

of the diſeaſe itſelf, but to point out the method of preventing it, we ſhall not take up time in ſhewing its progreſs from the firſt invaſion to its commonly fatal end.

The common notion that this poiſon may lie in the body for many years, and afterwards prove fatal, is both hurtful and ridiculous. It muſt render ſuch perſons as have had the misfortune to be bit very unhappy, and can have no good effects. If the perſon takes proper medicines for forty days after the time of his being bit, and feels no ſymptom of the diſeaſe, there is reaſon to believe him out of danger.

The medicines recommended for preventing the effects of the bite of a mad dog, are chiefly ſuch as promote the different ſecretions and antiſpaſmodics.

Dr. Mead recommends a preventive medicine, which he ſays he never knew fail, though in the ſpace of thirty years he had uſed it a thouſand times.

The doctor's preſcription is as follows—

"Take aſh coloured ground liver-wort, cleaned, dried, and powdered, half an ounce; of black pepper powdered, a quarter of an ounce. Mix theſe well together, and divide the powder into four doſes; one of which muſt be taken every morning faſting, for four mornings ſucceſſively, in half an Engliſh pint of cow's milk warm.

"After theſe four doſes are taken, the patient muſt go into the cold bath, or a cold ſpring or river, every morning faſting for a month; he muſt be dipped all over, but not ſtay in (with his head above water) longer than half a minute, if the water be very cold; after this he muſt go in three times a week for a fortnight longer.

"The perſon muſt be bled before he begins to uſe the medicine *."

We ſhall next mention the famous Eaſt India ſpeci-

* Though we give this prescription on the credit of Dr. Mead, yet we would not advise any person, who has reason to believe that he has been bit by a dog which was really mad, to trust to it alone. Mead was an able physician; but he seems to have been no great philosopher, and was sometimes the dupe of his own credulity.

fic, as it is called. This medicine is compoſed of cinnabar and muſk. It is eſteemed a great antiſpaſmodic; and by many extolled as an infallible remedy for preventing the effects of the bite of a mad dog.

"Take native or factitious cinnabar, of each twenty four grains, musk ſixteen grains. Let theſe be made into a fine powder, and taken in a glaſs of fine arrack or brandy."

This ſingle doſe is ſaid to ſecure the perſon for thirty days, at the end of which it muſt be repeated; but if he has any ſymptoms of the diſeaſe, it muſt be repeated in three hours.

The following is likewiſe reckoned a great antiſpaſmodic medicine—

"Take of Virginian ſnake root in powder half a drachm, gum aſafœtida twelve grains, gum camphire, ſeven grains; make theſe into a bolus with a little ſyrup of ſaffron."

Camphire may alſo be given in the following manner:

"Take purified nitre half an ounce, Virginian ſnake root in powder two drachms, camphire one drachm; rub them together in a mortar, and divide the whole into ten doſes."

Mercury is likewiſe recommended as of great efficacy both in the prevention and cure of this kind of madneſs. When uſed as a preventive, it will be ſufficient to rub daily a drachm of the ointment into the parts about the wound.

Vinegar is likewiſe of conſiderable ſervice, and ſhould be taken freely, either in the patient's food or drink.

Theſe are the principal medicines recommended for preventing the effects of the bite of a mad dog. We would not, however, adviſe people to truſt to any one of them; but from a proper combination of their different powers, there is the greateſt reaſon to hope for ſucceſs.

The great error in the uſe of theſe medicines lies in not taking them for a ſufficient length of time. They are uſed more like charms than medicines intended to produce any change in the body. To this, and not to the inſufficiency of the medicines, we muſt impute their frequent want of ſucceſs.

Dr. Mead ſays, that the virtue of this medicine conſiſts in promoting urine. But how a poiſon ſhould be expelled by urine, with only three or four doſes of any medicine, however powerful, is not eaſy to conceive. More time is certainly neceſſary, even though the medicine were more powerful than that which the doctor preſcribes.

The Eaſt India ſpecific is ſtill more exceptionable on this account.

As theſe and moſt other medicines, taken ſingly, have frequently been found to fail, we ſhall recommend the following courſe:

If a perſon be bit in a fleſhy part, where there is no hazard of hurting any large blood veſſel, the parts adjacent to the wounds may be cut away. But if this be not done ſoon after the bite has been received, it will be better to omit it.

The wound may be dreſſed with ſalt and water, or a pickle made of vinegar and ſalt, and afterwards dreſſed twice a day with yellow baſilicon mixed with red precipitate of mercury.

The patient ſhould begin to uſe either Dr. Mead's medicine, or ſome of the others mentioned above. If he takes Mead's medicine, he may uſe it, as the doctor directs, for four days ſucceſſively. Let him then omit it for two or three days, and again repeat the ſame number of doſes as before.

During this courſe he muſt rub into the parts about the wound, daily, one drachm of the mercurial ointment. This may be done for ten or twelve days at leaſt.

When this courſe is over he may take a purge or two, and wait a few days till the effect of the mercury be gone off. He muſt then begin to uſe the cold bath, into which he may go every morning for five or ſix weeks. If he ſhould feel cold or chilly for a long time after coming out of the cold bath, it will be better to uſe a tepid one, or to have the water a little warm.

In the mean time, we would adviſe him not to leave off all internal medicines, but to take either one of the

boluſes of ſnake root, aſafœtida, and camphire; or one of the powders of nitre, camphire, and ſnake root, twice a day. Theſe may be uſed the whole time that he is bathing.

During the uſe of the mercurial ointment, the patient muſt keep within doors, and take nothing cold.

A proper regimen muſt be obſerved throughout the whole courſe. The patient ſhould abſtain from fleſh, and all ſalted and high ſeaſoned proviſions. He muſt avoid ſtrong liquors, and live moſtly upon a light and rather ſpare diet. His mind ſhould be kept as eaſy and cheerful as poſſible, and all exceſſive heat and violent paſſions avoided with the utmoſt care.

I have never ſeen this courſe of medicine with proper regimen fail to prevent the hydrophobia; and cannot help again obſerving, that the want of ſucceſs muſt generally be owing either to the application of improper medicines, or not uſing proper ones for a ſufficient length of time.

Mankind are extremely fond of every thing that promiſes a ſudden or miraculous cure. By truſting to theſe they often loſe their lives, when a regular courſe of medicine would have rendered them abſolutely ſafe. This holds remarkably, in the preſent caſe. Numbers of people, for example, believe if they or their cattle be once dipped in the ſea, it is ſufficient; as if the ſalt water were a charm againſt the effects of the bite. This, and ſuch like whims, have proved fatal to many.

It is a common notion, if a perſon be bit by a dog which is not mad, that if he ſhould go mad afterwards, the perſon would be affected with the diſorder at the ſame time; but this notion is too ridiculous to deſerve a ſerious conſideration. It is a good rule, however, to avoid all dogs as much as poſſible, as the diſeaſe is often upon them for ſome time before its violent ſymptoms appear. The hydrophobia has been occaſioned by the bite of a dog which ſhewed no other ſymptoms of the diſeaſe but liſtleſsneſs and a ſullen diſpoſition.

Though we do not mean to treat fully of the cure of the hydrophobia, yet we are far from reckoning it incurable. The notion that this diſeaſe could not be cured, has been productive of the moſt horrid conſequences. It was uſual either to abandon the unhappy perſons, as ſoon as they were ſeized with the diſeaſe, to their fate, to bleed them to death, or to ſuffocate them between matreſſes or feather-beds, &c. This conduct certainly deſerved the ſevereſt puniſhment. We hope, for the honour of human nature, it will never again be heard of.

I have never had an opportunity of treating this diſeaſe, and therefore can ſay nothing of it from my own experience; but the learned Dr. Tiſſot ſays, it may be cured in the following manner.

1. The patient muſt be bled to a conſiderable quantity; and this may be repeated twice, or thrice, or even a fourth time, if circumſtances require it.

2. The patient ſhould be put, if poſſible, into a warm bath: and this ſhould be uſed twice a-day.

3. He ſhould every day receive two, or even three emollient clyſters.

4. The wound, and the parts adjoining to it, ſhould be rubbed with the mercurial ointment twice a day.

5. The whole limb which contains the wound ſhould be rubbed with oil, and be wrapped in an oily flannel.

6 Every three hours a doſe of Cob's powder ſhould be taken in a cup of the infuſion of lime tree and elder flowers. This powder is made by rubbing together in a mortar, to a very fine powder, of native and fictitious cinnabar, each twenty four grains; of muſk, ſixteen grains ‡.

7 The following bolus is to be given every night, and to be repeated in the morning, if the patient be not

‡ The Ormskirk medicine, as it is called, ſeems to me to conſiſt chiefly of cinnabar. Though it is ſaid to be infallible as a preventive, yet I would not advise any one to truſt to it alone. Indeed, it is ordered to be taken in a manner which gives it more the appearance of a charm than of a medicine. Surely if a medicine is to produce any change in the body, it muſt be taken for ſome conſiderable time, and in ſufficient quantity.

eaſy, waſhing it down with the infuſion mentioned above; take one dram of Virginian ſnake root in powder; of camphire and aſafœtida, ten grains each; of opium, one grain; and with a ſufficient quantity of conſerve, or rob of elder, make a bolus.

8. If there be a great nauſea at the ſtomach, with a bitterneſs in the mouth, thirty five or forty grains of ipecacuanha, in powder, may be taken for a vomit.

9. The patient's food, if he takes any, muſt be light; as panado, ſoups made of farinaceous or mealy vegetables, &c.

10. If the patient ſhould long continue weak, and ſubject to terrors, he may take half a drachm of the Peruvian bark thrice a-day.

The next poiſonous animal which we ſhall mention is the VIPER. The greaſe of this animal, rubbed into the wound, is ſaid to cure the bite. Though that is all the viper catchers generally do when bit we ſhould not think it ſufficient for the bite of an enraged viper. It would ſurely be more ſafe to have the wound well ſucked ‡, and afterwards rubbed with warm ſalad oil. A poultice of bread and milk, ſoftened with ſalad oil, ſhould likewiſe be applied to the wound; and the patient ought to drink freely of vinegar whey, or water-gruel with vinegar in it, to make him ſweat. Vinegar is one of the beſt medicines which can be uſed in any kind of poiſon, and ought to be taken very liberally. If the patient be ſick, he may take a vomit. This courſe will be ſufficient to cure the bite of any of the poiſonous animals of this country.

With regard to poiſonous inſects, as the bee, the waſp,

‡ The practice of ſucking out poiſons is very ancient; and indeed nothing can be more rational. Where the bite cannot be cut out, this is the moſt likely way for extracting the poiſon. There can be no danger in performing this office, as the poiſon does no harm, unleſs it be taken into the body by a wound. The perſon who ſucks the wound ought, however, to waſh his mouth frequently with ſalad oil, which will ſecure him from even the leaſt inconveniency. The Pſylli in Africa, and the Marſi in Italy, were famed for curing the bites of poiſonous animals, by ſucking the wound; and we are told, that the Indians in North America practiſe the ſame at this day.

Hemlock.

Henbane.

Nightshade.

Wolfsbane.

POISONOUS HERBS.

the hornet, &c. their ſtings are ſeldom attended with danger, unleſs when a perſon happens to be ſtung by a great number of them at the ſame time; in which caſe ſomething ſhould be done to abate the inflammation and ſwelling. Some, for this purpoſe, apply honey; others lay pounded parſley to the part. A mixture of vinegar and Venice treacle is likewiſe recommended; but I have found rubbing the part with warm ſalad oil, ſucceed very well. Indeed, when the ſtings are ſo numerous as to endanger the patient's life, which is ſometimes the caſe, he muſt not only have oily poultices applied to the part, but ſhould likewiſe be bled, and take ſome cooling medicines, as nitre, or cream of tartar, and ſhould drink plentifully of diluting liquors.

It is the happineſs of this iſland to have very few poiſonous animals, and thoſe which we have are by no means of the moſt virulent kind. Nine-tenths of the effects attributed to poiſon or venom in this country, are really other diſeaſes, and proceed from quite different cauſes.

We cannot, however, make the ſame obſervation with regard to poiſonous vegetables. Theſe abound every where, and prove often fatal to the ignorant and unwary. This indeed is chiefly owing to careleſsneſs. Children ought early to be cautioned againſt eating any kind of fruit, roots, or berries, which they do not know; and all poiſonous plants to which they can have acceſs, ought, as far as poſſible, to be deſtroyed. This would not be ſo difficult a taſk as ſome people imagine.

Poiſonous plants have do doubt their uſe, and they ought to be propagated in proper places; but, as they prove often deſtructive to cattle, they ſhould be rooted out of all paſture grounds. They ought likewiſe for the ſafety of the human ſpecies, to be deſtroyed in the neighbourhood of all towns and villages; which by the bye, are the places where they moſt commonly abound. I have ſeen the poiſonous hemlock, henbane, wolfsbane, and deadly night ſhade, all growing within the environs of a ſmall town, where though ſeveral perſons, within the memory of thoſe living in it, had loſt their lives by

one or other of these plants, yet no method that I could hear of, had ever been taken to root them out; though this might done at a very trifling expence.

Seldom a year passes but we have accounts of several persons poisoned by eating hemlock roots, instead of parsnips, or some kinds of fungus which they had gathered for mushrooms. These examples ought to put people upon their guard with respect to the former, and to put the latter entirely out of use. Mushrooms may be a delicate dish, but they are a dangerous one, as they are generally gathered by persons who do not know one kind of fungus from another, and take every thing for a mushroom which has that appearance.

We might here mention many other plants and animals of a poisonous nature which are found in foreign countries; but, as our observations are chiefly intended for this island, we shall pass these over. It may not, however, be amiss to observe, for the benefit of such of our countrymen as go to America, that an effectual remedy is now said to be found for the bite of the rattle-snake. The prescription is as follows—Take of the roots of plantain and horehound, in summer, roots and branches together a sufficient quantity; bruise them in a mortar, and squeeze out the juice, of which give, as soon as possible, one large spoonful; if the patent be swelled you must force it down his throat. This generally will cure; but if he finds no relief in an hour after, you may give another spoonful, which never fails. If the roots are dried, they must be moistened with a little water. To the wound may be applied a leaf of good tobacco moistened with rum.

We give this upon the faith of Dr. Brookes, who says it was the invention of a negro, for the discovery of which he had his freedom purchased, and a hundred pounds per annum settled upon him during life, by the General Assembly of Carolina.

It is possible there may be in nature specific remedies for every kind of poison; but as we have very little faith in any of those which have yet been pretended to be discovered, we shall beg leave again to recommend

Real Mushroom & Champignon.

Poisonous Fungi.

Pub. by Thomas Kelly, Paternoster Row, Feb. 18. 1809.

the moſt ſtrict attention to the following, rules, viz. that when any poiſonous ſubſtance has been taken into the ſtomach, it ought, as ſoon as poſſible, to be diſcharged by vomits, clyſters, and purges; and, when poiſon has been received into the body by a wound, that it be expelled by medicines which promote the different ſecretions, eſpecially thoſe of ſweat, urine, and inſenſible perſpiration; to which may be joined antiſpaſmodics, or ſuch medicines as take off tenſion and irritation; the chief of which are opium, muſk, camphire, and aſafoetida.

CHAP. XLVII.

OF THE VENEREAL DISEASE.

IN the firſt edition of this book the veneral diſeaſe was omitted. The reaſons, however, which at that time induced me to leave it out, have upon more mature conſideration vaniſhed. Bad conſequences, no doubt, may ariſe from ignorant perſons tampering with medicine in this diſorder; but the danger from that quarter ſeems to be more than balanced by the great and ſolid advantages which muſt ariſe to the patient from an early knowledge of this caſe, and an attention to a plan of regimen, which, if it does not cure the diſeaſe, will be ſure to render it more mild, and leſs hurtful to the conſtitution.

It is peculiarly unfortunate for the unhappy perſons who contract this diſeaſe, that it lies under a ſort of diſgrace. This renders diſguiſe neceſſary, and makes the patient either conceal his diſorder altogether, or apply to thoſe who promiſe a ſudden and ſecret cure; but who, in fact, only remove the ſymptoms for a time, while they fix the diſeaſe deeper in the habit. By this means a ſlight infection, which might have been eaſily removed, is often converted into an obſtinate, and ſometimes incurable malady.

Another unfavourable circumſtance attending this diſ-

eaſe is, that it aſſumes a varity of different ſhapes, and may with more propriety be called an aſſemblage of diſeaſes, than a ſingle one. No two diſeaſes can require a more different method of treatment than this does in its different ſtages. Hence the folly and danger of truſting to any particular noſtrum for the cure of it. Such noſtrums are, however, generally adminiſtered in the ſame manner to all who apply for them, without the leaſt regard to the ſtate of the diſeaſe, the conſtitution of the patient, the degree of infection, and and a thouſand other circumſtances of the utmoſt importance.

Though the venereal diſeaſe is generally the fruit of unlawful embraces, yet it may be communicated to the innocent as well as the guilty. Infants, nurſes, midwifes, and married women whoſe huſbands lead diſſolute lives, are often affected with it, and frequently loſe their lives, by not being aware of their danger in due time. The unhappy conditions of ſuch perſons will certainly plead our excuse, if any excuse be neceſſary, for endeavouring to point out the ſymptoms and cure of this too common diſeaſe.

To enumerate all its different ſymptoms, however, and to trace the diſeaſe minutely through its various ſtages, would require a much larger ſpace than falls to this part of my ſubject; I ſhall therefore confine my obſervations chiefly to circumſtances of importance, omitting ſuch as are either trifling, or which occur but ſeldom. I ſhall likewiſe paſs over the hiſtory of the diſeaſe, with the different methods of treatment which it has undergone ſince it was firſt introduced into Europe, and many other circumſtances of a ſimilar nature: all of which, though they might tend to amuſe the reader, yet could afford him little or no uſeful knowledge.

OF THE VIRULENT GONORRHŒA.

The virulent gonorrhœa is an involuntary diſcharge of infectious matter from the parts of generation in either ſex. It generally makes its appearance within eight or ten days after the infection has been received:

times indeed it appears in two or three days, and at other times not before the end of four or five weeks. Previous to the diſcharge, the patient feels an itching, with a ſmall degree of pain, in the genitals. Afterwards a thin glary matter begins to diſtil from the urinary paſſage, which ſtains the linen, and occaſions a ſmall degree of titillation, particularly at the time of making water; this, gradually increaſing, ariſes at length to a degree of heat and pain, which are chiefly perceived about the extremity of the urinary paſſage, where a ſlight degree of redneſs and inflammation likewiſe begin to appear.

As the diſorder advances, the pain, heat of urine, and running, increaſe, while freſh ſymptoms daily enſue. In men, the erections become painful and involuntary, and are more frequent and laſting than when natural. This ſymptom is more troubleſome when the patient is warm in bed. The pain which was at firſt only perceived towards the extremity, now begins to reach all up the urinary paſſage, and is moſt intenſe juſt after the patient has done making water. The running gradually recedes from the colour of ſeed, grows yellow, and at length puts on the appearance of matter.

When the diſorder has arrived at its height, all the ſymptoms are more intenſe; the heat of urine is ſo great, that the patient dreads the making water; and though he feels a conſtant inclination this way, yet it is rendered with the greateſt difficulty, and often by drops; the involuntary erections now become extremely painful and frequent; there is alſo a pain, heat, and ſenſe of fulneſs about the ſeat, and the running is plentiful and ſharp, of a brown, greeniſh, and ſometimes of a bloody colour

By a proper treatment, the violence of the ſymptoms gradually abates; the heat of the urine goes off; the involuntary and painful erections, and the heat and pain about the ſeat, becomes eaſier; the running alſo gradually decreaſes, grows whiter and thicker, till at laſt it entirely diſappears.

By attending to theſe ſymptoms, the gonorrhœa may

be generally diſtinguiſhed from any other diſeaſe. There are, however, ſome few diſorders from which it may be miſtaken, as an ulcer in the kidnies or bladder, the fluor albus, or whites, in women, &c. But in the former of theſe the matter comes away only with the urine, or when the ſphincter of the bladder is open; whereas in a gonorrhœa the diſcharge is conſtant. The latter is more difficult to diſtinguiſh, and muſt be known chiefly from its effects, as pain, communicating the infection, &c.

REGIMEN.——When a perſon has reaſon to ſuſpect that he has caught the venereal infection, he ought moſt ſtrictly to obſerve a cooling regimen, to avoid every thing of a heating nature, as wines, ſpirituous liquors, rich ſauces, ſalted high ſeaſoned and ſmoke dried proviſions, &c. as alſo aromatic and ſtimulating vegetables, as onions, garlic, ſhalot, nutmeg, muſtard, cinnamon, mace, ginger, and ſuch like. His food ought chiefly to conſiſt of mild vegetables, milks, broths, light puddings, panado, gruels, &c. His drink may be barley water, milk and water, decoctions of marſhmallows and liquorice, linſeed tea, or clear whey. Of theſe he ought to drink plentifully. Violent exerciſe of all kinds, eſpecially riding on horſeback, and venereal pleaſures, are to be avoided. The patient muſt beware of cold, and when the inflammation is violent he ought to keep his bed.

MEDICINE.—A virulent gonorrhœa cannot always be cured ſpeedily and effectually at the ſame time. The patient ought therefore not to expect, nor the phyſician to promiſe it. It will often continue for two or three weeks, and ſometimes for five or ſix, even where the treatment has been very different.

Sometimes, indeed, a ſlight infection may be carried off in a few days by bathing the parts in warm milk and water, and injecting frequently up the urethra a little ſweet oil or linſeed tea, about the warmth of new milk. Should theſe not ſucceed in carrying off the infection, they will at leaſt have a tendency to leſſen its virulence.

To effect a cure, however, aſtringent injections will generally be found neceſſary. Theſe may be various ways prepared, but I think thoſe made with the white vitriol are both more ſafe and efficacious. They can be made ſtronger or weaker as circumſtances may require; but it is beſt to begin with the moſt gentle, and increaſe their power if neceſſary. I generally order a drachm of white vitriol to be diſſolved in eight or nine ounces of common or roſe water, and an ordinary ſyringe full of it to be thrown up three or four times a-day. If this quantity does not perform a cure, it may be repeated, and the doſe increaſed *.

Whether injections be uſed or not, cooling purges are always proper in the gonorrhœa. They ought not, however, to be of a ſtrong or draſtic kind. Whatever raiſes a violent commotion in the body, increaſes the danger, and tends to drive the diſeaſe deeper into the habit. Procuring two or three ſtools every ſecond or third day for the firſt fortnight, and the ſame number every fourth or fifth day for the ſecond, will generally be ſufficient to remove the inflammatory ſymptoms, to diminiſh the running, and to change the colour and conſiſtence of the matter, which gradually becomes more white and ropy as the virulence abates †.

* Although it is now very common to cure the gonorrhœa by aſtringent injections, there are ſtill many practitioners who do not approve this mode of practice. I can, however, from much experience, aſſert, that it is both the moſt eaſy, elegant, and efficacious method of cure; and that any bad conſequences arising from it muſt be owing to the ignorance or miſconduct of the practitioner himſelf and not the remedy. Many, for example, uſe ſtrong preparations of lead, all of which are dangerous when applied to the internal ſurfaces of the body; others uſe eſcharotics, which inflame and injure the parts. I have known a gonorrhœa actually cured by an injection made of green tea, and would always recommend gentle methods, where they will ſucceed.

† If the patient can ſwallow a ſolution of ſalts and manna, he may take ſix drachms; or if his conſtitution requires it, an ounce of the former, with half an ounce of the latter. Theſe may be diſſolved in an Engliſh pint of boiling water, whey, or thin water-gruel, and taken early in the morning.

If an infuſion of ſenna and tamarinds be more agreeable, two drachms of the former, and an ounce of the latter, may be infuſed all

When the inflammatory ſymptoms run high, bleeding is always neceſſary at the beginning. This operation, as in other topical inflammations, muſt be repeated according to the ſtrength and conſtitution of the patient, and the vehemence and urgency of the ſymptoms.

Medicines which promote the ſecretion of urine are likewiſe proper in this ſtage of the diſorder. For this purpoſe, an ounce of nitre and two ounces of gum-arabic, pounded together, may be divided into twenty-four doſes, one of which may be taken frequently in a cup of the patient's drink. If theſe ſhould make him paſs his urine ſo often as to become troubleſome to him, he may either take them leſs frequently, or leave out the nitre altogether, and take equal parts of gum-arabic and cream of tartar. Theſe may be pounded together, and a tea-ſpoonful taken in a cup of the patient's drink four or five times a-day. I have generally found this anſwer extremely well, both as a diuretic, and for keeping the body gently open.

When the pain and inflammation are ſeated high, towards the neck of the bladder, it will be proper frequently to throw up an emmollient clyſter, which beſides the benefit of procuring ſtools, will ſerve as a fomentation to the inflamed parts.

Soft poultices, when they can conveniently be applied to the parts, are of great ſervice. They may be made of the flower of linſeed, or of wheat-bread and

night in an English pint of boiling water. The infusion may be strained next morning, and half an ounce of Glauber's salts dissolved in it. A tea-cupful of this infusion may be taken every half hour till it operates.

Should the patient prefer an electuary, the following will he found to answer very well. Take of the lenitive electuary four ounces, cream of tartar two ounces, jalap in powder two drachms, rhubarb one drachm, and as much of the syrup of pale roses as will serve to make up the whole into a soft electuary. Two or three tea-spoonfuls of this may be taken over-night, and about the same quantity next morning, every day that the patient choses to take a purge.

The doses of the above medicines may be increased or diminished, according as the patient finds it necessary. We have ordered the salts to be dissolved in a large quantity of water, because it rendered their operation more mild.

ilk, ſoftened with freſh butter or ſweet oil. When oultices cannot be conveniently uſed, cloths wrung it of warm water, or bladders filled with warm milk nd water, may be applied. I have often known the ioſt excruciating pains, during the inflammatory ſtate f the gonorrhœa, relieved by one or other of theſe pplications.

Few things tend more to keep off inflammation in he ſpermatic veſſels, than a proper truſs for the ſcro- um. It ought to be ſo contrived as to ſupport the teſ- icles, and ſhould be worn from the firſt appearance of he diſeaſe, till it has ceaſed ſome weeks.

The above treatment will ſometimes remove the go- norrhœa ſo quickly, that the perſon will be in doubt whether he really laboured under that diſeaſe. This, however, is too favourable a turn to be often expected. It more frequently happens, that we are able only to procure an abatement or remiſſion of the inflammatory ſymptoms, ſo far as to make it ſafe to have recourſe to the great antidote mercury.

Many people, on the firſt appearance of a gonorrhœa, fly to the uſe of mercury. This is a bad plan. Mer- cury is often not at all neceſſary in a gonorrœha; and when taken too early, it does miſchief. It may be ne- ceſſary to complete the cure, but can never be proper at the commencement of it.

When bleeding, purging, fomentations and the other things recommended as above, have eaſed the pain, ſoftened the pulſe, relieved the heat of urine, and ren- dered the involuntary erections leſs frequent, the pa- tient may begin to uſe mercury in any form that is leaſt diſagreeable to him.

If he takes the common mecurial pill, two at night and one in the morning will be a ſufficient doſe at firſt. Should they affect the mouth too much, the doſe muſt be leſſened; if not at all, it may be gradually increaſed to five or ſix pills in the day. If calomel be thought preferable, two or three grains of it, formed into a bo- lus, with a little of the conſerve of hips, may be taken

at bed-time, and the doſe gradually increaſed to eight or ten grains. One of the moſt common preparations of mercury now in uſe is the corroſive ſublimate. This may be taken in the manner afterwards recommended under the confirmed lues or pox. I have always found it one of the moſt ſafe and efficacious medicines when properly uſed.

The above medicines may either be taken every day, or every other day, as the patient is able to bear them. They ought never to be taken in ſuch quantity as to raiſe a ſalivation, unleſs in a very ſlight degree. The diſeaſe may be more ſafely, and as certainly, cured without a ſalivation as with it. When the mercury runs off by the mouth, it is not ſo ſucceſsful in carrying off the diſeaſe, as when it continues longer in the body and is diſcharged gradually.

Should the patient be purged or griped in the night by the mercury, he muſt take an infuſion of ſenna, or ſome other purgative, and drink freely of water-gruel, to prevent bloody ſtools, which are very apt to happen ſhould the patient catch cold, or if the mercury has not been duly prepared. When the bowels are weak and the mercury is apt to gripe or purge, theſe diſagreeable conſequences may be prevented by taking, with the above pills or bolus, half a drachm or two ſcruples of diaſcordium, or of the Japonic confection.

To prevent the diſagreeable circumſtance of the mercury's affecting the mouth too much, or bringing on a ſalivation, it may be combined with purgatives. With this view the laxative mercurial pill has been contrived, the uſual doſe of which is half a drachm or three pills, night and morning, to be repeated every other day; but the ſafer way is for the patient to begin with two, or even with one pill, gradually increaſing the doſe.

To ſuch perſons as can neither ſwallow a bolus nor a pill, mercury may be given in a liquid form, as it can be ſuſpended even in a watery vehicle, by means of gum arabic, which not only ſerves this purpoſe, but

kewiſe preven's the mercury from affecting the mouth, id renders it in many reſpects a better medicine ‡.

It happens very fortunately for thoſe who cannot be rought to take mercury inwardly, and likewiſe for erſons whoſe bowels are too tender to bear it, that an xternal application of it will anſwer equally well, and ı ſome reſpects better It muſt be acknowledged that ıercury, taken inwardly for any length of time, great- weakens and diſorders the bowels; for which reaſon hen a plentiful uſe of it becomes neceſſary, we would rrefer rubbing to the mercurial pills. The common ıercurial or blue ointment will anſwer very well. Of ıat which is made by rubbing together equal quanti- es of hog's lard and quickſilver, about a drachm may e uſed at a time. The beſt time for rubbing it on is at ight, and the moſt proper place the inner ſide of the highs. The patient ſhould ſtand before the fire when e rubs, and ſhould wear flannel drawers next his ſkin t the time he is uſing the ointment. If ointment of a veaker or ſtronger kind be uſed, the quantity muſt be ncreaſed or diminiſhed in proportion.

If, during the courſe of the ointment, the inflamma- on of the genital parts, together with the heat and veriſhneſs ſhould return, or if the mouth ſhould grow ore, the gums tender, and the breath become offenſive, doſe or two of Glauber's ſalts, or ſome other cooling urge, may be taken, and the rubbing intermitted for a ew days. As ſoon, however, as the ſigns of ſpitting re gone off, if the virulency be not quite corrected, he ointment muſt be repeated, but in ſmaller quanti- ties, and at longer intervals than before. Whatever vay mercury is adminiſtered, its uſe muſt be perſiſted ı as long as any virulency is ſuſpected to remain.

‡ Take quickſilver, one drachm, gum arabic reduced to a muci- ge two drachms; let the quickſilver be rubbed with the mucilage ı a marble mortar, until the globules of mercury entirely disappear; fterwards add gradually, ſtill continuing the trituration, half an unce of balſamic ſyrup, and eight ounces of ſimple cinnamon wa- er. Two table ſpoonfuls of this ſolution may be taken night and orning. Some reckon this the beſt form in which quickſilver can e exhibited for the cure of a gonorrhœa.

During this, which may be called the ſecond ſtage of the diſorder, though ſo ſtrict a regimen is not neceſſary as in the firſt or inflammatory ſtate, yet intemperance of every kind muſt be avoided. The food muſt be light, plain, and of eaſy digeſtion; and the greateſt indulgence that may be allowed with reſpect to drink, is a little wine diluted with a ſufficient quantity of water. Spirituous liquors are to be avoided in every ſhape. I have often known the inflammatory ſyſtems renewed and heightened, the running increaſed, and the cure rendered extremely difficult and tedious, by one fit of exceſſive drinking.

When the above treatment has removed the heat of urine and foreneſs of the genital parts, when the quantity of running is conſiderably leſſened, without any pain or ſwelling in the groin or teſticle ſupervening, when the patient is free from involuntary erections, and, laſtly, when the running becomes pale, whitiſh, thick, void of ill ſmell, and tenacious or ropy; when all or moſt of theſe ſymptoms appear, the gonorrhœa is arrived at its laſt ſtage, and we may gradually proceed to treat it as a gleet, with aſtringent and agglutinating medicines.

OF GLEETS.

A gonorrhœa frequently repeated, or improperly treated, often ends in a gleet, which may either proceed from a relaxation, or from ſome remains of the diſeaſe. It is, however, of greateſt importance in the cure of the gleet to know from which of theſe cauſes it proceeds. When the diſcharge proves very obſtinate, and receives little or no check from aſtringent remedies, there is ground to ſuſpect that it is owing to the latter; but if the drain is inconſtant, and is chiefly obſervable when the patient is ſtimulated by laſcivious ideas, or upon ſtraining to go to ſtool, we may reaſonably conclude that it is chiefly owing to the former.

In the cure of a gleet proceeding from relaxation, the principal deſign is to brace and reſtore a proper degree of tenſion to the debilitated and relaxed veſſels.

or this purpoſe, beſides the medicines recommended
the gonorrhœa, the patient may have recourſe to
ronger and more powerful aſtringents, as the Peru-
ian bark †, alum, vitriol, gall, tormentil, biſtort, ba-
uſtines, tincture of gum kino, &c. The injections
ay be rendered more aſtringent by the addition of a
ew grains of alum, or increaſing the quantity of vitriol
s far as the parts are able to bear it.

The laſt remedy which we ſhall mention in this caſe,
ss the cold bath, in which perhaps there is not a more
powerful bracer in the whole compaſs of medicine. It
ought never to be omitted in this ſpecies of gleet, un-
eſs there be ſomething in the conſtitution of the pa-
tient which renders the uſe of it unſafe. The chief
objections to the uſe of the cold bath are a full habit,
and an unſound ſtate of the viſcera. The danger from
the former may always be leſſened, if not removed,
by purging and bleeding; but the latter is an inſur-
mountable obſtacle, as the preſſure of the water, and
the ſudden contraction of the external veſſels, by
throwing the blood with too much force upon the in-
ternal parts, are apt to occaſion ruptures of the veſſels,
or a flux of humours upon the diſeaſed organs. But
where no objection of this kind prevails, the patient
ought to plunge over head in water every morning
faſting, for three or four weeks together. He ſhould
not, however, ſtay long in the water, and ſhould take
care to have his ſkin dried as ſoon as he comes out.

The regimen proper in this caſe is the ſame as was
mentioned in the laſt ſtage of the gonorrhœa; the diet
muſt be drying and aſtringent, and the drink Spa, Pyr-
mont or Briſtol waters, with which a little claret or red

† The Peruvian bark may be combined with other aſtringents, and prepared in the following manner—

Take of Peruvian bark bruiſed ſix drachms, of freſh galls bruiſed two drachms; boil them in a pound and a half of water to a pound; to the ſtrained liquor add three ounces of the ſimple tincture of the bark. A ſmall tea-cupfull of this may be taken three times a day, adding to each cup fifteen or twenty drops of the acid elixir of vitriol.

wine may ſometimes be mixed. Any perſon may now afford to drink theſe waters, as they can be every where prepared at almoſt no expence, by a mixture of common chalk and oil of vitriol.

When the gleet does not in the ſmalleſt degree yield to theſe medicines, there is reaſon to ſuſpect that it proceeds from ulcers. In this caſe recourſe muſt be had to mercury, and ſuch medicines as tend to correct any predominant acrimony with which the juices may be affected, as the decoction of China, ſarſaparilla, ſaſſafras, or the like.

Mr. Fordyce ſays, he has ſeen many obſtinate gleets, of two, three, or four years ſtanding, effectually cured by a mercurial inunction, when almoſt every other medicine has been tried in vain. Dr. Chapman ſeems to be of the ſame opinion; but he ſays he has always found the mercury ſucceed beſt in this caſe, when joined with terebinthinate and other agglutinating medicines. For which reaſon the doctor recommends pills made of calomel and Venice turpentine ‡, and deſires that their uſe may be accompanied with a decoction of guaiacum or ſarſaparilla.

The laſt kind of remedy which we ſhall mention for the cure of ulcers in the urinary paſſage, are the ſuppurating candles or bougies. As theſe are prepared various ways, and are generally to be bought ready made, it is needleſs to ſpend time in enumerating the different ingredients of which they are compoſed, or teaching the manner of preparing them. Before a bougie be introduced into the urethra, however, it ſhould be ſmeared all over with ſweet oil, to prevent it from ſtimulating too ſuddenly. It may be ſuffered to continue in from one to ſeven or eight hours, according as the patient can bear it. Obſtinate ulcers are not only

‡ Take Venice turpentine, boiled to a ſufficient degree of hardness, half an ounce, calomel half a drachm. Let theſe be mixed and formed into ſixty pills, of which five or ſix may be taken night or morning. If during the uſe of theſe pills the mouth ſhould grow ſore, or the breath become offenſive, they muſt be diſcontinued till theſe ſymptoms diſappear.

ften healed, but tumours and excreſcences in the rinary paſſages taken away, and an obſtruction of urine emoved by means of bougies.

OF THE SWELLED TESTICLE.

The ſwelled teſticle may either proceed from infection lately contracted, or from the venereal poiſon lurking in the blood; the latter, indeed, is not very common, but the former frequently happens both in the firſt and ſecond ſtages of a gonorrhœa, particularly when the running is unſeaſonably checked by cold, hard drinking, ſtrong draſtic purges, violent exerciſe, the too early uſe of aſtringent medicines, or the like.

In the inflammatory ſtage bleeding is neceſſary, which muſt be repeated according to the urgency of the ſymptoms †. The food muſt be light, and the drink diluting. High ſeaſoned food, fleſh, wines, and every thing of a heating nature, are to be avoided. Fomentations are of ſingular ſervice. Poultices of bread and milk, ſoftened with freſh butter or oil, are likewiſe very proper, and ought conſtantly to be applied when the patient is in bed; when he is up, the teſticles ſhould be kept warm, and ſupported by a bag or truſs, which may eaſily be contrived in ſuch a manner as to prevent the weight of the teſticle from having any effect.

If it ſhould be found impracticable to clear the teſticle by the cooling regimen now pointed out, and extended according to circumſtances, it will be neceſſary to tread the patient through ſuch a complete antivenereal courſe as ſhall enſure him againſt any future uneaſineſs. For this purpoſe, beſides rubbing the mercurial ointment on the parts as directed in the gonorrhœa, the patient muſt be confined to bed, if neceſſary, for five or ſix weeks, ſuſpending the teſticle all the while with a bag or truſs, and plying him inwardly with ſtrong decoctions of ſarſaparilla.

† I have been accuſtomed for ſome time paſt to apply leeches to inflamed teſticles, which practice has always been followed with the moſt happy effects.

When theſe means do not ſucceed, and there is reaſon to ſuſpect a ſcrophulous or cancerous habit, either of which may ſupport a ſchirrous induration, after the venereal poiſon is corrected, the parts ſhould be fomented daily with a decoction of hemlock, the bruiſed leaves of which may likewiſe be added to the poultice, and the extract at the ſame time taken inwardly †. This practice is ſtrongly recommended by Dr. Storck in ſchirrous and cancerous caſes; and Mr. Fordyce aſſures us, that by this method he has cured diſeaſed teſticles of two or three years ſtanding, even when ulcerated, and when the ſchirrus had begun to be affected with pricking and lancing pains.

OF BUBOES.

Venereal buboes are hard tumours ſeated in the groin, occaſioned by venereal poiſon lodged in this part. They are of two kinds, viz. ſuch as proceed from a recent infection, and ſuch as accompany a confirmed lues.

The cure of recent buboes, that is, ſuch as appear ſoon after impure coition, may be firſt attempted by diſperſion; and, if that ſhould not ſucceed, by ſuppuration. To promote the diſperſion of the bubo, the ſame regimen muſt be obſerved as was directed in the firſt ſtage of a gonorrhœa. The patient muſt likewiſe be bled, and take ſome cooling purges, as the decoction of tamarinds and ſenna, Glauber's ſalts, and the like. If by this courſe the ſwelling and other inflammatory ſymptoms abate, we may ſafely proceed to the uſe of mercury, which muſt be continued till the venereal virus is quite ſubdued ‡.

But if the bubo ſhould, from the beginning, be attended with great heat, pain, and pulſation, it will be

† The extract of hemlock may be made into pills, and taken in the manner directed under the article Cancer.

‡ For the dispersion of a bubo, a number of leeches applied to the part affected will be found equally efficacious as in the inflamed testicle.

proper to promote its ſuppuration. For this purpoſe the patient may be allowed to uſe his ordinary diet, and to take now and then a glaſs of wine. Emollient cataplaſms, conſiſting of bread and milk ſoftened with oil or freſh butter, may be applied to the part; and, in cold conſtitutions, where the tumour advances ſlowly, white lily roots boiled, or ſliced onions raw, and a ſufficient quantity of yellow baſilicon, may be added to the poultice.

When the tumour is ripe, which may be known by its conical figure, the ſoftneſs of the skin, and a fluctuation of matter plainly to be felt under the finger, it may be opened either by a cauſtic or a lancet, and afterwards dreſſed with digeſtive ointment.

It ſometimes however happens, that buboes can neither be diſperſed nor brought to a ſuppuration, but remain hard indolent tumours. In this caſe the indurated glands muſt be conſumed by cauſtic; if they ſhould become ſchirrous, they muſt be diſſolved by the application of hemlock, both externally and internally, as directed in the ſchirrous teſticle.

OF CHANCRES.

Chancres are ſuperficial, callous, eating ulcers, which may happen either with or without a gonorrhœa. They are commonly ſeated about the glands, and make their appearance in the following manner—Firſt a little red pimple ariſes, which ſoon becomes pointed at top, and is filled with a whitiſh matter, inclining to yellow. This pimple is hot, and generally itches before it breaks; afterwards it degenerates into an obſtinate ulcer, the bottom of which is uſually covered with a viſcid mucus, and whoſe edges generally become hard and callous. Sometimes the firſt appearance reſemble a ſimple excoriation of the cuticle; which, however, if the cauſe be venereal, ſoon becomes a true chancre.

A chancre is ſometimes a primary affection, but it is much oftener ſymptomatic, and is the mark of a confirmed lues. Primary chancres diſcover themſelves

ſoon after impure coition, and are generally ſeated in parts covered with a thin cuticle, as the lips, the nipples of women, the glans penis of men, &c *.

When a chancre appears ſoon after impure coition, its treatment is nearly ſimilar to that of the virulent gonorrhœa. The patient muſt obſerve the cooling regimen, loſe a little blood, and take ſome gentle doſes of ſalts and manna. The parts affected ought frequently to be bathed, or rather ſoaked, in warm milk and water, and if the inflammation be great, an emollient poultice or cataplaſm may be applied to them. This courſe will, in moſt caſes, be ſufficient to abate the inflammation, and prepare the patient for the uſe of mercury.

Symptomatic chancres are commonly accompanied with ulcers in the throat, nocturnal pains, ſcurvy eruptions about the roots of the hair, and other symptoms of a confirmed lues. Though they may be ſeated in any of the parts mentioned above, they commonly appear upon the private parts, or the inſide of the thigh. They are alſo leſs painful, but frequently much larger and harder than primary chancres. As their cure muſt depend upon that of the pox, of which they are only a ſymptom, we ſhall take no further notice of them till we come to treat of a confirmed lues ‡.

Thus we have related moſt of the ſymptoms which accompany or ſucceed a violent gonorrhœa, and have alſo given a ſhort view of the proper treatment; there are, however, ſeveral others which ſometimes attend

* When venereal ulcers are ſeated in the lips, the infection may be communicated by kiſſing. I have ſeen very obſtinate venereal ulcers in the lips, which I have all the reaſon in the world to believe were communicated in this manner.

Nurſes ought to beware of ſuckling infected children, or having their breaſts drawn by perſons tainted with the venereal diſeaſe. This caution is peculiarly neceſſary for nurſes who reſide in the neighbourhood of great towns.

‡ I have found it anſwer extremely well to ſprinkle chancres twice a day with calomel. This will often produce a cure without any other application whatever. If the chancres are upon the glans, they may be waſhed with milk and water, and afterwards the calomel may be applied as above.

his diſeaſe, as a ſtrangury, or obſtruction of urine, a phymoſis, paraphymoſis, &c.

A ſtrangury may be occaſioned either by a ſpaſmodic conſtriction, or an inflammation of the urethra and parts about the neck of the bladder. In the former caſe the patient begins to void his urine with tolerable eaſe; but as ſoon as it touches the galled or inflamed urethra, a ſudden conſtriction takes place, and the urine is voided by ſpurts, ſometimes by drops only. When the ſtrangury is owing to an inflammation about the neck of the bladder, there is a conſtant heat and uneaſineſs of the part, a perpetual deſire to make water, while the patient can only render a few drops, and a troubleſome teneſmus, or conſtant inclination to go to ſtool.

When the ſtrangury is owing to ſpaſm, ſuch medicines as tend to dilute and blunt the ſalts of the urine will be proper. For this purpoſe, beſides the common diluting liquors, ſoft and cooling emulſions, ſweetened with the ſyrup of poppies, may be uſed. Should theſe not have the deſired effect, bleeding and emollient fomentations will be neceſſary.

When the complaint is evidently owing to an inflammation about the neck of the bladder, bleeding muſt be more liberally performed, and repeated according to the urgency of the ſymptoms. After bleeding, if the ſtrangury ſtill continues, ſoft clyſters, with a proper quantity of laudanum in them, may be adminiſtered, and emollient fomentations applied to the region of the bladder; at the ſame time the patient may take every four hours a tea-cupful of barley water, to an Engliſh pint of which ſix ounces of the ſyrup of marſhmallows, four ounces of the oil of ſweet almonds, and half an ounce of nitre, may be added. If theſe remedies ſhould not relieve the complaint, and a total ſuppreſſion of urine ſhould come on, bleeding muſt be repeated, and the patient ſet in a warm bath up to the middle. It will be proper in this caſe to diſcontinue the diuretics, and to draw off the water with the catheter; but as the patient is ſeldom able to bear its being introduced, we would rather recommend the uſe of mild

bougies. Theſe often lubricate the paſſage, and greatly facilitate the diſcharge of urine. Whenever they begin to ſtimulate or give any uneaſineſs, they may be withdrawn. The phymoſis is ſuch a conſtriction of the prepuce over the glans, as hinders it from being drawn backwards; the paraphymoſis, on the contrary, is ſuch a conſtriction of the prepuce behind the glans, as hinders it from being brought forward.

The treatment of theſe ſymptoms is ſo nearly the ſame with that of the virulent gonorrhœa, that we have no occaſion to enlarge upon it. In general, bleeding, purging, poultices, and emollient fomentations are ſufficient. Should theſe, however, fail of removing the ſtricture, and the parts be threatened with a mortification, twenty or thirty grains of ipecacuanha, and one grain of emetic tartar, may be given for a vomit, and may be worked off with warm water or thin gruel.

It ſometimes happens that, in ſpite of all endeavours to the contrary, the inflammation goes on, and ſymptoms of a beginning mortification appear. When this is the caſe, the prepuce muſt be ſcarified with a lancet, and if neceſſary, divided in order to prevent a ſtrangulation, and ſet the impriſoned glans at liberty. We ſhall not deſcribe the manner of performing this operation, as it ought to be done by a ſurgeon. When a mortification has taken place, it will be neceſſary, beſides performing the above operations, to foment the parts frequently with cloths wrung out of a ſtrong decoction of camomile flowers and barks and to give a drachm of bark in powder every two or three hours.

With regard to the priapiſm, chordee, and other diſtortions of the penis, the treatment is no way different from that of the gonorrhœa. When they prove very troubleſome, the patient may take a few drops of laudanum at night, eſpecially after the operation of a purgative through the day.

OF A CONFIRMED LUES.

We have hitherto treated of thoſe affections in which the venereal poiſon is ſuppoſed to be confined

iefly to the particular part by which it was receiv-
d, and ſhall next take a view of the lues in its con-
rmed ſtate, that is, when the poiſon is actually re-
eived into the blood, and circulating with it through
very part of the body, mixes with the ſeveral ſecre-
ons, and renders the whole habit tainted.

The ſymptoms of a confirmed lues are, buboes in the
roin, pains in the head and joints, which are peculiar-
y troubleſome in the night, or when the patient is
warm in bed; ſcabs and ſcurfs in various parts of the
ody, eſpecially on the head, of a yellowiſh colour,
reſembling a honeycomb; corroding ulcers in various
arts of the body, which generally begin about the
he throat, from whence they creep gradually, by the
alate, towards the cartilage of the noſe, which they
eſtroy; excreſcences or exoſtoſes ariſe in the middle
f the bones, and the ſpungy ends become brittle, and
reak upon the leaſt accident; at other times they are
oft and bend like wax; the conglobate glands become
ard and callous, and form in the neck, armpits, groin,
nd meſentery, hard moveable tumors like the king's
evil; tumors of different kinds are likewiſe formed in
he lymphatic veſſels, tendons, ligaments, and nerves,
s the gummata, ganglia, nodes, tophs, &c.; the eyes
re affected with itching, pain, redneſs, and ſometimes
with total blindneſs, and the ears with a ſinging noiſe,
ain and deafneſs, whilſt their inteſtinal ſubſtance is
exulcerated and rendered carious; at length all the
nimal, vital, and natural functions are depraved; the
ace becomes pale and livid, the body emaciated and
nfit for motion, and the miſerable patient falls into
n atrophy or waſting conſumption.

Women have ſymptoms peculiar to the ſex; as can-
ers of the breaſt, a ſuppreſſion or overflowing of the
menſes, the whites, hyſteric affections, an inflamma-
tion, abſceſs, ſchirrus, gangrene, cancer or ulcer of the
womb; they are generally either barren or ſubject to
abortion, or, if they bring children into the world,
they have a univerſal eryſipelas, are half rotten, and
covered with ulcers.

Such is the catalogue of ſymptoms attending this dreadful diſeaſe in its confirmed ſtate. Indeed, they are ſeldom all to be met with in the ſame perſon, or at the ſame time; ſo many of them however are generally preſent as are ſufficient to alarm the patient, and if he has reaſon to ſuſpect the infection is lurking in his body, he ought immediately to ſet about the expulſion of it, otherwiſe the moſt tragical conſequences will enſue.

The only certain remedy hitherto known in Europe for the cure of this diſeaſe is mercury, which may be uſed in great variety of forms, with nearly the ſame ſucceſs. Some time ago it was reckoned impoſſible to cure a confirmed lues without a ſalivation. This method is now, however, pretty generally laid aſide, and mercury is found to be as efficacious, or rather more ſo, in expelling the venereal poiſon when adminiſtered in ſuch a manner as not to run off by the ſalivary glands.

Though many are of opinion that the mercurial ointment is as efficacious as any other preparation of that mineral; yet experience has taught me to think otherwiſe. I have very often ſeen the moſt obſtinate venereal caſes, where great quantities of mercurial ointment had been uſed in vain, yield to the ſaline preparation of mercury. Nor am I ſingular in this opinion. Mr. Clare, ſurgeon, aſſures me, that for ſome time paſt he has employed in venereal caſes a ſaline preparation of mercury with moſt happy ſucceſs. This preparation, rubbed with a ſufficient quantity of any mild powder, he applies in ſmall portions to the tongue, where, with a gentle degree of friction, it is immediately abſorbed, and produces its full effect upon the ſyſtem, without doing the leaſt injury to the ſtomach or bowels; a matter of the greateſt importance in the application of this moſt active and powerful remedy.

It is impoſſible to aſcertain either the exact quantity of medicines that muſt be taken, or the time they ought to be continued, in order to perform a cure.

These will vary according to the constitution of the patient, the season of the year, the degree of infection, the time it was lodged in the body, &c. But though it is difficult, as Astruc observes, to determine *a priori*, what quantity of mercury will, in the whole, be necessary to cure this distemper completely; yet it may be jugded of *a posteriori*, from the abatement and ceasing of the symptoms. The same author adds, that commonly not less than two ounces of the strong mercurial ointment is sufficient, and not more than three or four ounces necessary.

The only chemical preparation of mercury which we shall take notice of, is the corrosive sublimate. This was some time ago brought into use for the venereal disease in Germany, by the illustrious Baron Van Swieten, and was soon after introduced into Britain by the learned sir John Pringle, at that time physician to the army. The method of giving it is as follows—One grain of corrosive sublimate is dissolved in two ounces of French brandy or malt spirits; and of this solution an ordinary table spoonful, or the quantity of half an ounce, is to be taken twice a day, and to be continued as long as any symptoms of the disorder remain. To those whose stomach cannot bear the solution, the sublimate may be given in form of pill *.

Several woods, roots, and barks, have been recommended for curing the venereal disease, but none of them have been found, upon experience, to answer the high encomiums which had been bestowed upom them. Though no one of these is to be depended upon alone, yet when joined with mercury, some of them are found to be very beneficial in promoting a cure. One of the

* The sublimate may be given in distilled water, or any other liquor that the patient chuses. I commonly order ten grains to be dissolved in an ounce of the spirit of wine, for the conveniency of carriage, and let the patient take twenty or thirty drops of it night and morning, in half a glass of brandy or other spirits. Mr. Debra, an ingenious chymist of this place, informs me that he prepares a salt of mercury, much more mild and gentle in its operation than the sublimate, though equally efficacious.

beſt we know yet is ſarſaparilla, which may be prepared and taken according to the directions in the Appendix *.

The mezereon root is likewiſe found to be a powerful aſſiſtant to the ſublimate, or any other mercurial. It may either be uſed along with the ſarſaparilla, as directed in the Appendix, or by itſelf. Thoſe who chooſe to uſe the mezereon by itſelf, may boil an ounce of the freſh bark, taken from the root, in twelve Engliſh pints of water to eight, adding towards the end an ounce of liquorice. The doſe of this is the ſame as of the decoction of ſarſaparilla.

We have been told that the natives of America cure the venereal diſeaſe in every ſtage by a decoction of the root of a plant called the lobelia. It is uſed either freſh or dried, but we have no certain accounts with regard to the proportion. Sometimes they mix other roots with it, as thoſe of the ranunculus, the ceanothus, &c. but whether theſe are deſigned to diſguiſe or aſſiſt it, is doubtful. The patient takes a large draught of the decoction early in the morning, and continues to uſe it for his ordinary drink through the day †.

Many other roots and woods might be mentioned which have been extolled for curing the venereal diſeaſe, as the china root, the roots of ſoap wort, burdock, &c. as alſo the wood of guaiacum and ſaſſafras;

* See Appendix, *Decoction of Sarsaparilla.*

† Though we are ſtill very much in the dark with regard to the method of curing this diſeaſe among the natives of America, yet it is generally affirmed that they do cure it with ſpeed, ſafety, and ſucceſs, and that without the leaſt knowledge of mercury. Hence it becomes an object of conſiderable importance to diſcover their method of cure. This might ſurely be done by making trials of the various plants which are found in thoſe parts, and particularly of ſuch of the natives as are known to make uſe of it. All people in a rude ſtate take their medicines chiefly from the vegetable kingdom, and are often poſſeſſed of valuable ſecrets with regard to the virtues of plants, of which more enlightened nations are ignorant. Indeed, we make no doubt but ſome plants of our own growth, were proper pains taken to diſcover them, would be found as efficacious in curing the venereal diſeaſe as thoſe of America. It muſt, however, be remembered, that what will cure the venereal diſeaſe in one country, will not always be found to have equal ſucceſs in another.

ut as none of them have been found to poſſeſs virtues perior to thoſe already mentioned, we ſhall, for the ke of brevity, paſs them over, and ſhall conclude our bſervations on this diſeaſe, with a few general re-arks concerning the proper management of the pa-ent, and the nature of the infection,

GENERAL OBSERVATIONS.

The condition of the patient ought always to be con-dered previous to his entering upon a courſe of mer-ury in any form. It would be equally raſh and dan-erous to adminiſter mercury to a perſon labouring un-er any violent acute diſeaſe, as a putrid fever, pleuriſy, eripneumony, or the like. It would likewiſe be dan-erous in ſome chronic caſes; as a ſlow hectic fever, r the laſt ſtage of a conſumption. Sometimes, how-ver, theſe diſeaſes proceed from a confirmed lues; in hich caſe it will be neceſſary to give mercury. In hronic diſeaſes of a leſs dangerous nature, as the aſth-na, the gravel, and ſuch like, mercury, if neceſſary, ay be ſafely adminiſtered. If the patient's ſtrength as been greatly exhauſted by ſickneſs, labour, abſti-ence, or any other cauſe, the uſe of mercury muſt be oſtponed, till by time, reſt, and a nouriſhing diet, it an be ſufficiently reſtored.

Mercury ought not to be adminiſtered to women luring the menſtrual flux, or when the period is near t hand. Neither ſhould it be given in the laſt ſtage of regnancy. If, however, the woman be not near the ime of her delivery, and circumſtances render it ne-eſſary, mercury may be given, but in ſmaller doſes, nd at greater intervals than uſual; with theſe precau-ions, both the mother and child may be cured at the ame time, if not, the diſorder will at leaſt be kept rom growing worſe, till the woman be brought to bed, nd ſufficiently recovered, when a more effectual me-hod may be purſued, which if ſhe ſuckles her child, will in all probability be ſufficient for the cure of both.

Mercury ought always to be adminiſtered to infants

with the greateſt caution. Their tender condition unfits them for ſupporting a ſalivation, and makes it neceſſary to adminiſter even the mildeſt preparations of mercury to them with a ſparing hand. A ſimilar conduct is recommended in the treatment of old perſons, who have the misfortune to labour under a confirmed lues. No doubt the infirmities of age muſt render people leſs able to undergo the fatigues of a ſalivation; but this, as was formerly obſerved, is never neceſſary; beſides, we have generally found that mercury had much leſs effect upon very old perſons, than on thoſe who were younger.

Hyſteric and hypochondriac perſons, and ſuch as are ſubject to an habitual diarrhœa or dyſentery, or to frequent and violent attacks of the epilepſy, or who are afflicted with the ſcrophula or the ſcurvy, ought to be cautious in the uſe of mercury. Where any one of theſe diſorders prevails, it ought either if poſſible to be cured, or at leaſt palliated, before the patient enters upon a courſe of mercury. When this cannot be done, the mercury muſt be adminiſtered in ſmaller doſes, and at longer intervals than uſual.

The moſt proper ſeaſons for entering upon a courſe of mercury, are the ſpring and autumn, when the air is of a moderate warmth. If the circumſtances of the caſe, however, will not admit of delay, we muſt not defer the cure on account of the ſeaſon, but muſt adminiſter the mercury; taking care at the ſame time to keep the patient's chamber warmer or cooler, according as the ſeaſon of the year requires.

The next thing to be conſidered is the preparation neceſſary to be obſerved before we proceed to adminiſter a courſe of mercury. Some lay great ſtreſs upon this circumſtance, obſerving, that by previously relaxing the veſſels, and correcting any diſorder which may happen to prevail in the blood, not only the mercury will be diſpoſed to act more kindly, but many other inconveniencies will be prevented.

We have already recommended bleeding and gentle purges, previous to the adminiſtration of mercury, and

l only now add, that theſe are always to be repeat-
ccording to the age, ſtrength, conſtitution, and o-
r circumſtances of the patient. Afterwards, if it can
conveniently done, the patient ought to bathe once
twice a day, for a few days, in lukewarm water.
diet in the mean time muſt be light, moiſt, and
ling. Wine, and all heating liquors, alſo violent
lily exerciſe, and all great exertions of the mind,
carefully to be avoided.

A proper regimen is likewiſe to be obſerved by ſuch
re under a courſe of mercury. Inattention to this
only endangers the patient's life, but often alſo diſ-
oints him of a cure. A much ſmaller quantity of
rcury will be ſufficient for the cure of a perſon who
s low, keeps warm, and avoids all manner of ex-
s, than of one who cannot endure to put the ſmalleſt
raint upon his appetites; indeed, it but rarely hap-
s that ſuch are thoroughly cured.

There is hardly any thing of more importance, either
preventing or removing venereal infection, than
anlineſs. By an early attention to this, the infection
ght often be prevented from entering the body; and
ere it has already taken place, its effects may be
atly mitigated. The moment any perſon has reaſon
ſuſpect that he has received the infection, he ought
waſh the parts with water and ſpirits, ſweet oil, or
k and water; a ſmall quantity of the laſt may like-
ſe be injected up the urethra, if it can be conveni-
ly done. Whether the diſeaſe at firſt took it's riſe
m dirtineſs is hard to ſay; but wherever that pre-
ls, the infection is found in its greateſt degree of
ulence, which gives ground to believe that a ſtrict
ention to cleanlineſs would go far towards extirpat-
it altogether *.

* I have not only often ſeen a recent infection carried off in a few
s by means of cleanliness, viz. bathing, fomentations, injections,
but have likewiſe found it of the greateſt advantage in the more
anced ſtages of the diſeaſe. Of this I had lately a very remarkable
ance, in a man whoſe penis was almoſt wholly conſumed by vene-
ulcers; the matter had been allowed to continue on the ſores,

When the veneral diſeaſe has been neglected, or improperly treated, it often becomes a diſorder of the habit. In this caſe, the cure muſt be attempted by reſtoratives, as a milk diet, the decoction of ſarſaparilla, and ſuch like, to which mercury may be occaſionally added. It is a common practice in North Britain to ſend ſuch patients to drink goat-whey. This is a very proper plan, provided the infection has been totally eradicated beforehand; but when that is not the caſe, the patient truſts to the whey for finiſhing his cure, he will often be diſappointed. I have frequently known the diſeaſe return with all its virulence after a courſe of goat-whey, even when that courſe had been thought quite ſufficient for completing the cure.

One of the moſt unfortunate circumſtances attending patients in this diſeaſe, is the neceſſity they are often laid under of being ſoon well. This induces them to take medicine too faſt, and leave it off too ſoon. A few grains more of medicine, or a few days longer confinement, would often be ſufficient to perfect the cure; whereas, by neglect of theſe a ſmall degree of virulence is ſtill left in the humours, which gradually vitiates, and at length contaminates the whole maſs. To avoid this, we would adviſe, that the patient ſhould never

without any care having been taken to clean them, till, notwithstanding the use of mercury and other medicines, it has produced the effects above mentioned. I ordered warm milk and water to be injected three or four times a day into all the sinuous ulcers, in order to wash out the matter; after which they were stuffed with dry lint to absorb the fresh matter as it was generated. The patient at the same time took every day half a grain of the corrosive sublimate of mercury, dissolved in an ounce of brandy, and drank an English quart of the decoction of sarsaparilla. By this treatment, in about six weeks, he was perfectly cured; and what was very remarkable, a part of the penis was actually regenerated.

Doctor Gilchrist has given an account of a species of the *lues venerea* which prevails in the west of Scotland, to which the natives give the name of *Sibbins* or *Sivvins*. The Doctor observes, that the spreading of this disease is chiefly owing to the neglect of cleanliness, and seems to think, that by due attention to this *virtue*, it might be extirpated. The treatment of this disease is similar to that of a confirmed lues or pox. The *yaws*, a disease which is now very common both in America and the West India islands may also be cured in the same manner

ve off taking medicine immediately upon the disap-
ring of the ſymptoms, but continue it for ſometime
er, gradually leſſening the quantity, till there is
ficient ground to believe that the diſeaſe is entirely
dicated.

Is is not only difficult, but abſolutely impoſſible, to
ertain the exact degree of virulence that may attend
diſeaſe; for which reaſon it will be a much ſafer
e to continue the uſe of medicine too long, than to
ve it off too ſoon. This ſeems to be the leading
xim of a modern practitioner of ſome note for the
neral diſeaſe, who always orders his patient to per-
m a quarantine of at leaſt forty days, during which
ne he takes forty bottles of, I ſuppoſe, a ſtrong
coction of ſarſaparilla, or ſome anti-venereal ſimple.
hoever takes this method, and adds a ſufficient quan-
y of corroſive ſublimate, or ſome other active pre-
ration of mercury to the decotion, will ſeldom fail to
re a confirmed lues.

It is peculiarly unfortuuate for the cure of this diſ-
ſe, that not one in ten of thoſe who contract it, are
ther able or willing to ſubmit to a proper plan of re-
men. The patient is willing to take medicine; but
muſt follow his buſineſs, and, to prevent ſuſpicion,
uſt eat and drink like the reſt of the family. This
the true ſource of nine-tenths of all the miſchief
riſing from the venereal diſeaſe. I never knew the
ure attended with any great difficulty or danger
here the patient ſtrictly followed the phyſician's ad-
ice: but a volume would not be ſufficient to point out
he dreadful conſequences which proceed from an op-
oſite conduct. Scirrhous teſticles, ulcerous ſore
hroats, madneſs, conſumptions, carious bones, and a
otten progeny, are a few of the bleſſings derived from
his ſource.

There is a ſpecies of falſe reaſoning, with regard to
his diſeaſe, which proves fatal to many. A perſon of
ound conſtitution contracts a ſlight degree of the diſ-
order; he gets well without taking any great care, or
ſing much medicine, and hence concludes that this

will always be the caſe. The next time the diſeaſe occurs, though ten times more virulent, he purſues the ſame courſe, and his conſtitution is ruined. Indeed, different degrees of virulence in the ſmall-pox are not greater than in this diſeaſe, though, as the learned Sydenham obſerves, in ſome caſes the moſt ſkilful phyſicians cannot cure, and in others the moſt ignorant old woman cannot kill the patient in that diſorder. Though a good conſtitution is always in favour of the patient, yet a great ſtreſs may be laid upon it. It does not appear from obſervation that the moſt robuſt conſtitution is able to overcome the virulence of the venereal contagion, after it has got into the habit. In this caſe a proper courſe of medicine is always indiſpenſibly neceſſary.

Although it is impoſſible, on account of the different degrees of virulence, &c. to lay down fixed and certain rules for the cure of this diſeaſe, yet the following general plan will always be found ſafe, and often ſucceſsful, viz. to bleed and adminiſter gentle purges with diuretics during the inflammatory ſtate, and as ſoon as the ſymptoms of inflammation are abated, to adminiſter mercury, in any form that may be moſt agreeable to the patient. The ſame medicine, aſſiſted by the decoction of ſarſaparilla, and a proper regimen, will not only ſecure the conſtitution againſt the further progreſs of a confirmed pox, but will generally perform a complete cure.

Although the venereal diſeaſe may not, in ſome degree, be a proper ſubject of diſcuſſion for regular families and the nurſery, yet there are many individuals to whom the obſervations I have made, may be of ſervice in this complaint. There is no diſeaſe which opens ſo wide a field for the quack, none in which he ſo completely picks the pocket and ruins the conſtitution. Mercury is the chief ingredient of all theſe noſtrums, and by mercury every apothecary's boy pretends to cure the venereal diſeaſe. In one ſpecies of the diſorder mercury is a certain cure, but it requires diſcrimination; and a medicine of a nature ſo very active,

cannot be adminiſtered with too much care. Thoſe who value their health or their life, will not ſuffer themſelves to be, in a matter ſo ſerious, the dupes of ignorance or impoſture.

CHAP. XLVIII.

OF THE DISEASES OF WOMEN.

WOMEN in all civiliſed nations have the management of domeſtic affairs, and it is very proper they ſhould, as Nature has made them leſs fit for the more active and laborious employments. This indulgence, however, is generally carried too far; and females, inſtead of being benefited by it, are greatly injured, from want of exerciſe and free air. To be ſatisfied of this, one need only compare the freſh and ruddy looks of a milk-maid, with the pale complexion of thoſe females whoſe whole time is ſpent within doors. Though nature has made an evident diſtinction between the male and female, with regard to bodily ſtrength and vigour, yet ſhe certainly never meant, either that the one ſhould be always without, or the other always within doors.

The confinement of females, beſides hurting their figure and complexion, relaxes their ſolids, weakens their minds, and diſorders all the functions of the body. Hence proceed obſtructions, indigeſtion, flatulence, abortions, and the whole train of nervous diſorders. Theſe not only unfit women for being mothers and nurſes, but often render them whimſical and ridiculous. A ſound mind depends ſo much upon a healthy body, that were the latter is wanting, the former is rarely to be found.

I have always obſerved, that women who were chiefly employed without door, in the different branches of husbandry, gardening, and the like, were almoſt as hardy as their husbands, and that their children were likewiſe ſtrong and healthy. Bad as the effects of con-

finement and inactivity upon both ſexes have been already ſhewn, we ſhall proceed to point out thoſe circumſtances in the ſtructure and deſign of females, which ſubject them to peculiar diſeaſes; the chief of which are, their *monthly evacuations*, *pregnancy*, and *childbearing*. Theſe indeed cannot properly be called diſeaſes, but from the delicacy of the ſex, and their being often improperly managed in ſuch ſituations, they become the ſource of numerous calamities.

OF THE MENSTRUAL DISCHARGE.

Females generally begin to menſtruate about the age of fifteen, and leave it off about fifty, which renders theſe two periods the moſt critical of their lives. About the firſt appearance of this diſcharge, the conſtitution undergoes a very conſiderable change, generally indeed for the better, though ſometimes for the worſe. The greateſt care is now neceſſary, as the future health and happineſs of the female depends in a great meaſure upon her conduct at this period *.

If a girl about this time of life be confined to the houſe, kept conſtantly ſitting, and neither allowed to romp about, nor employed in any active buſineſs, which give exerciſe to the whole body, ſhe becomes weak, relaxed, and puny; her blood not being duly prepared, ſhe looks pale and wan; her health, ſpirits, and vigour decline, nnd ſhe ſinks into a valetudinarian for life. Such is the fate of numbers of theſe unhappy females, who, either from too much indulgence, or their own narrow circumſtances, are, at this critical peroid, denied the benefit of exerciſe and free air.

* It is the duty of mothers, and those who are entrusted with the education of girls, to instruct them early in the conduct and management of themselves at this critical period of their life. False modesty, inattention, and ignorance of what is beneficial or hurtful at this time, are the sources of many diseases and misfortunes in life, which a few sensible lessons from an experieneed matron might have prevented. Nor is care less necessary in the subsequent returns of this discharge. Taking improper food, violent affections of the mind, or catching cold at this period, is often sufficient to ruin the health, or to render the female ever after incapable of procreation.

A lazy indolent diſpoſition proves likewiſe very hurtful to girls at this period. One ſeldom meets with complaints from obſtructions amongſt the more active and induſtrious part of the ſex; whereas the indolent and lazy are ſeldom free from them. Theſe are in a manner eaten up by the *chloroſis*, or green ſickneſs, and other diſeaſes of this nature. We would therefore recommend it to all who wiſh to eſcape theſe calamities, to avoid indolence and inactivity, as their greateſt enemies, and to be as much abroad in the open air as poſſible.

Another thing which proves very hurtful to girls about this period of life is unwholeſome food. Fond of all manner of traſh, they often indulge in it, till their whole humours are quite vitiated. Hence enſue indigeſtions, want of appetite, and a numerous train of evils. If the fluids be not duly prepared, it is utterly impoſſible that the ſecretions ſhould go properly on. Accordingly we find, that ſuch girls as lead an indolent life, and eat great quantities of traſh, are not only ſubject to obſtructions of the *menſes*, but likewiſe to glandular obſtructions; as the ſcrophula, or king's evil, &c.

A dull diſpoſition is alſo very hurtful to girls at this period. It is a rare thing to ſee a ſprightly girl who does not enjoy good health, while the grave, moping, melancholy creature, proves the very prey of vapours and hyſterics. Youth is the ſeaſon for mirth and cheerfulneſs: let it therefore be indulged; it is an abſolute duty. To lay in a ſtock of health in time of youth is as neceſſary a piece of prudence, as to make proviſion againſt the decay of old age. While, therefore, wiſe Nature prompts the happy youth to join in ſprightly amuſements, let not the ſevere dictates of hoary age forbid the uſeful impulſe, nor damp with ſerious gloom the ſeaſon deſtined to mirth and innocent feſtivity.

Another thing very hurtful to females about this period of life, is ſtraight clothes. They are fond of a fine ſhape, and fooliſhly imagine that this can be acquired by lacing themſelves tight. Hence, by ſqueezing the ſtomach and bowels, they hurt the digeſtion, and oc-

caſion many incurable maladies. This error is not indeed ſo common as it has been, but, as faſhions change it may come about again; we therefore think it not improper to mention it. I know many females who, to this day, feel the dreadful effects of that wretched cuſtom which prevailed ſome years ago, of ſqueezing every girl into as ſmall a ſize in the middle as poſſible. Human invention could not poſſibly have deviſed a practice more deſtructive to health.

After a female has arrived at that period of life when the *menſes* uſually begin to flow, and they do not appear, but, on the contrary, her health and ſpirits begin to decline, we would adviſe, inſtead of ſhutting the poor girl up in the houſe, and doſing her with ſteel, aſafœtida, and other naufeous drugs, to place her in a ſituation where ſhe can enjoy the benefit of free air and agreeable company. There let her eat wholeſome food, take ſufficient exerciſe, and amuſe herſelf in the moſt agreeable manner; and we have little reaſon to fear, but Nature, thus aſſiſted, will do her proper work. Indeed ſhe ſeldom fails, unleſs the fault is on our ſide.

This diſcharge in the beginning is ſeldom ſo inſtantaneous as to ſurpriſe females unawares. It is generally preceded by ſymtoms which foretel its approach: as a ſenſe of heat, weight, and dull pain in the loins; diſtention and hardneſs of the breaſts; head-ach; loſs of appetite; laſſitude; paleneſs of the countenance and ſometimes a ſlight degree of fever. When theſe ſymptoms appear about the age at which the menſtrual uſually begins, every thing ſhould be carefully avoided which may obſtruct that neceſſary and ſalutary evacuation; and all means uſed to promote it; as ſitting frequently over the ſteams of warm water, drinking warm diluting liquors, &c.

After the *menſes* have once begun to flow, the greateſt care ſhould be taken to avoid every thing that may tend to obſtruct them. Females ought to be exceedingly cautions of what they eat or drink at the time they are out of order. Every thing that is cold, or apt to ſour on the ſtomach, ought to be avoided; as

ruit, butter-milk, and ſuch like. Fiſh, and all kinds f food that are hard of digeſtion, are alſo to be avoid-d. As it is impoſſible to mention every thing that may iſagree with individuals at this time, we would recom-nend it to every female to be very attentive to what iſagrees with herſelf, and carefully to avoid it.

Cold is extremely hurtful at this particular period. Aore of the ſex date their diſeaſes from colds caught vhile they are out of order, than from all other cauſes. This ought ſurely to put them upon their guard, and to nake them very circumſpect in their conduct at ſuch iimes. A degree of cold that will not in the leaſt hurt hem at another time, will at this period be ſufficient ntirely to ruin their health and conſtitution.

The greateſt attention ought likewiſe to be paid to he mind, which ſhould be kept as eaſy and cheerful as poſſible. Every part of the animal economy is influ-enced by the paſſions, but none more ſo than this. An-ger, fear, grief, and other affections of the mind, often occaſion obſtructions of the menſtrual flux, which prove abſolutely incurable.

From whatever cauſe this flux is obſtructed, except in the ſtate of pregnancy, proper means ſhould be uſed to reſtore it. For this purpoſe we would recommend ſufficient exerciſe in a dry, open, and rather cool air: wholeſome diet; and if the body be weak and languid, generous liquors; alſo cheerful company and all man-ner of amuſements. If theſe fail, recourſe muſt be had to medicine.

When obſtructions proceed from a weak relaxed ſtate of the ſolids, ſuch medicines as tend to promote digeſ-tion, to brace the ſolids, and aſſiſt the body in prepar-ing good blood, ought to be uſed. Pills compoſed of equal parts of prepared ſteel, powdered myrrh, and aloes, may be taken with advantage, two or three every night before going to bed. The principal medi-cines, however, are iron, and the Peruvian bark, with other bitters and aſtringents. Filings of iron may be infuſed in wine or ale, two or three ounces to an Eng-liſh quart, aud after it has ſtood for two or three weeks,

it may be filtered, and about half a wine-glaſs of it taken twice a-day; or prepared ſteel may be taken in the doſe of half a drachm, mixed with a little honey of treacle, three or four times a-day. The bark and other bitters may either be taken in ſubſtance or infuſion, as is moſt agreeable to the patient.

When obſtructions proceed from a viſcid ſtate of the blood; or for women of a groſs full habit, evacuations, and ſuch medicines as attenuate the humours, are neceſſary. The patient in this caſe ought to be bled, to bathe her feet frequently in warm water, to take now and then a cooling purge, and to live upon a ſpare thin diet. Her drink ſhould be whey, water, or ſmall beer, and ſhe ought to take ſufficient exerciſe. A tea-ſpoonful of the tincture of black helebore may be alſo taken twice a-day in a cup of warm water.

When obſtructions proceed from affections of the mind, as grief, fear, anger, &c. every method ſhould be taken to amuſe and divert the patient. And that ſhe may the more readily forget the cauſe of her affliction, ſhe ought, if poſſible, be removed from the place where it happened. A change of place, by preſenting the mind with a variety of new objects, has often a very happy influence in relieving it from the deepeſt diſtreſs. A ſoothing, kind, and affable behaviour to females in this ſituation is alſo of the laſt importance.

An obſtruction of the menſes is often the effect of other maladies. When this is the caſe, inſtead of giving medicines to force that diſcharge, which might be dangerous, we ought by all means to endeavour to reſtore the patient's health and ſtrength. When that is effected the other will return of courſe.

But the menſtrual flux may be too great as well as too ſmall. When this happens, the patient becomes weak, the colour pale, the appetite and digeſtion are bad, to which œdematous ſwellings of the feet, dropſies, and conſumptions often enſue. This frequently happens to women about the age of forty-five or fifty, and is very difficult to cure. It may proceed from a ſedentary life: a full diet, conſiſting chiefly of ſalted, high-ſeaſon-

d, or acrid food; the uſe of ſpirituous liquors; exeſſive fatigue; relaxation; a diſſolved ſtate of the lood; violent paſſions of the mind, &c.

The treatment of this diſeaſe may be varied according to its cauſe. When it is occaſioned by any error in he patient's regimen, an oppoſite courſe to that which nduced the diſorder muſt be purſued, and ſuch medicines taken as have a tendency to reſtrain the flux, and ounteract the morbid affections of the ſyſtem whence t proceeds.

To reſtrain the flux, the patient ſhould be kept quiet nd eaſy both in body and mind. If it be very violent, he ought to lie in bed with her head low; to live upon cool and ſlender diet, as veal or chicken broths, with read; and to drink decoctions of nettle-roots, or the reater comfrey. If theſe be not ſufficient to ſtop the lux, ſtronger aſtringents may be uſed, as Japan earth, lum, elixir of vitriol, the Peruvian bark, &c *.

The *uterine flux* may offend in quality as well as in uantity. What is uſually called the fluor albus, or whites, is a very common diſeaſe, and proves extremely hurtful to delicate women. This diſcharge, however, is not always white, but ſometimes pale, yellow, reen or of a blackiſh colour; ſometimes it is ſharp and orroſive, ſometimes foul and fœtid, &c. It is attended with a pale complexion, pain in the back, loſs of appetite, ſwelling of the feet, and other ſigns of debility. t generally proceeds from a relaxed ſtate of the body, riſing from indolence, the exceſſive uſe of tea, coffee, r other weak and watery diet.

To remove this diſeaſe, the patient muſt take as uch exerciſe as ſhe can bear without fatigue. Her

* Two drachms of alum and one of Japan earth may be pounded ogether, and divided into eight or nine doſes, one of which may be aken three times a-day.

Perſons whoſe ſtomachs cannot bear the alum, may take two tablepoonfuls of the tincture of roſes three or four times a-day, to each loſe of which ten drops of laudanum may be added.

If theſe ſhould fail, half a drachm of the Peruvian bark, in powder, vith ten drops of the elixir of vitriol, may be taken, in a glaſs of red vine four times a-day.

food ſhould be ſolid and nouriſhing, but of eaſy digeſtion; and her drink rather, generous, as red port or claret, mixed with Pyrmont, Briſtol, or lime-water. Tea and coffee are to be avoided. I have often known ſtrong broths have an exceeding good effect, and ſometimes a milk diet alone will perform a cure. The patient ought not to lie too long a-bed. When medicine is neceſſary, we know none preferable to the Peruvian bark, which in this caſe ought always to be taken in ſubſtance. In warm weather, the cold bath will be of conſiderable ſervice.

That period of life at which the menſes ceaſe to flow, is likewiſe very critical to the ſex. The ſtoppage of any cuſtomary evacuation, however ſmall, is ſufficient to diſorder the whole frame, and often to deſtroy life itſelf. Hence it comes to paſs, that ſo many women either fall into chronic diſorders, or die about this time. Such of them, however, as ſurvive it, without contracting any chronic diſeaſe, often become more healthy and hardy than they were before, and enjoy ſtrength and vigour to a very great age.

If the menſes ceaſe all of a ſudden in women of a full habit, they ought to abate ſomewhat of their uſual quantity of food, eſpecially of the moſt nouriſhing kind, as fleſh, eggs, &c. They ought likewiſe to take ſufficient exerciſe, and to keep the body open. This may be done by taking once or twice a-week, a little rhubarb, or an infuſion of hiera picra in wine or brandy.

It often happens that women of a groſs habit, at this period of life, have ulcerous ſores break out about their ancles, or in other parts of the body. Such ulcers ought to be conſidered as critical, and ſhould either be ſuffered to continue open, or have artificial drains ſubſtituted in their ſtead. Women who will have ſuch ſores dried up, are often ſoon after carried off by acute diſeaſes, or fall into thoſe of a chronic nature.

OF PREGNANCY.

Though pregnancy is not a diſeaſe, yet that ſtate is

en attended with a variety of complaints, which merit ention, and which ſometimes require the aſſiſtance of dicine. Some women indeed are more healthy during ir pregnancy, than at any other time; but this is by means the general caſe; moſt of them *breed in ſorrow*, d are frequently indiſpoſed during the whole time of egnancy. Few fatal diſeaſes, however, happen during at period; and hardly any, except abortion, that can called dangerous.

Pregnant women are often afflicted with the heart-rn. The method of treating this complaint has been ready pointed out. They are likewiſe, in the more ear- periods of pregnancy, often harraſſed with ſickneſs nd vomiting, eſpecially in the morning. The method ff relieving theſe complaints has alſo been ſhewn. Both ne head-ach and tooth-ach are very troubleſome ſymp-oms of pregnancy. The former may generally be re-moved by keeping the body gently open, by the uſe of runes, figs, roaſted apples, and ſuch like. When the ain is very violent bleeding may be neceſſary. For the reatment of the latter, we muſt refer to that article. Several other complaints incident to pregnant women night be mentioned, as a cough and difficulty of breath-ng, ſuppreſſion and incontinency of urine, &c. but as ll of theſe have been taken notice of before, it is need-eſs to repeat them.

Every pregnant woman is more or leſs in danger of abortion. This ſhould be guarded againſt with the greateſt care, as it not only weakens the conſtituton, but renders the woman liable to the ſame misfortune afterwards *. Abortion may happen at any period of pregnancy, but it is moſt common in the ſecond or third month. Sometimes, however, it happens in the fourth

* Every mother who procures an abortion does it at the hazard of her life; yet there are not a few who run this risk merely to prevent the trouble of bearing and bringing up children. It is surely a most unnatural crime, and cannot, even in the most abandoned, be viewed without horror; but in the decent matron, it is still more unpardonable.——Those wretches who daily advertise their assistance to women in this business deserve, in my opinion, the most severe of all human punishments.

or fifth. If it happens within the firſt month, it is uſually called a falſe conception; but after the ſeventh month, the child may often be kept alive by proper care.

The common cauſes of abortion are, the death of the child; weakneſs or relaxation of the mother; great evacuations; violent exerciſe; raiſing great weights; reaching too high; jumping, or ſtepping from an eminence; vomiting; coughing; convulſion-fits; blows on the belly; falls; fevers; diſagreeable ſmells; exceſs of blood; indolence; high living, or the contrary; violent paſſions or affections of the mind, as fear, grief, &c.

The ſigns of approaching abortion are, pain in the loins, or about the bottom of the belly: a dull heavy pain in the inſide of the thighs; a ſlight degree of coldneſs, or ſhivering; ſickneſs, palpitation of the heart; the breaſts become flat and ſoft; the belly falls; and there is a diſcharge of blood or watery humours from the womb.

To prevent abortion, we ſhould adviſe women of a weak or relaxed habit to uſe ſolid food, avoiding great quantities of tea, and other weak and watery liquors: to riſe early and go ſoon to bed; to ſhun damp houſes; take frequent exerciſe in the open air, but to avoid fatigue and never to go abroad in damp foggy weather, if they can ſhun it.

Women of a full habit ought to uſe a ſpare diet, avoiding ſtrong liquors, and every thing that may tend to heat the body, or increaſe the quantity of blood. Their diet ſhould be of an opening nature, conſiſting principally of vegetable ſubſtances. Every woman with child ought to be kept cheerful and eaſy in her mind. Her appetites, even though depraved, ought to be indulged as far as prudence will permit.

When any ſigns of abortion appear, the woman ought to be laid in bed on a matraſs, with her head low. She ſhould be kept quiet, and her mind ſoothed and comforted. She ought not to be kept too hot, nor to take any thing of a heating nature. Her food ſhould conſiſt of broths, rice and milk, jellies, gruels made of oatmeal, and the like, all of which ought to be taken cold.

ſhe be able to bear it, ſhe ſhould loſe at leaſt half a
nd of blood from the arm. Her drink ought to be
ey-water ſharpened with juice of lemon; or ſhe may
half a drachm of powdered nitre, in a cup of water-
el, every five or ſix hours. If the woman be ſeized
a violent looſeneſs, ſhe ought to drink the decoction
alcined hartſhorn prepared. If ſhe be affected with
niting, let her take frequently two table-ſpoonfuls of
ſaline mixture. In general opiates are of ſervice;
they ſhould always be given with caution.

anguine robuſt women, who are liable to miſcarry at
rtain time of pregnancy, ought always to be bled a
days before that period arrives. By this means, and
rving the regimen above preſcribed, they might
pe that misfortune.

Though we recommend due care for preventing abor-
n, we would not be underſtood as reſtraining pregnant
men from their uſual exerciſes. This would gene-
y operate the quite contrary way. Want of exerciſe
only relaxes the body, but induces a plethora, or too
at fulneſs of the veſſels, which are the two principal
ſes of abortion. There are, however, ſome women
o delicate a texture, that it is neceſſary for them to
id almoſt every kind of exerciſe during the whole
iod of pregnancy.

OF CHILD-BIRTH.

Many diſeaſes proceed from the want of due care in
ld-bed, and the more hardy part of the ſex are moſt
to deſpiſe the neceſſary precautions in this ſtate.
is is peculiarly the caſe with young wives. They
nk, when the labour pains are ended, the danger is
r; but in truth it may only then be ſaid to be begun.
ture, if left to herſelf, will ſeldom fail to expel the
us; but proper care and management are certainly
eſſary for the recovery of the mother. No doubt,
chief may be done by too much as well as by too little
e. Hence females who have the greateſt number of

attendants in child-bed, generally recover worſt. But this is not peculiarly its own intention, and is generally more dangerous than none at all *.

During actual labour, nothing of a heating nature ought to be given. The woman may now and then take a little panado, and her drink ought to be toaſt and water or thin groat-gruel. Spirits, wines, cordial-waters, and other things which are given with a view to ſtrengthen the mother, and promote the birth, for the moſt part tend only to increaſe the fever, inflame the womb, and retard the labour. Beſides they endanger the woman afterwards, as they often occaſion violent and mortal hæmorrhages, or diſpoſe her to eruptive and other fevers.

When the labour proves tedious and difficult, to prevent inflammations, it will be proper to bleed. An emollient clyſter ought likewiſe frequently to be adminiſtered, and the patient ſhould ſit over the ſteams of warm water. The paſſage ought to be gently rubbed with a little ſoft pomatum or freſh butter, and cloths wrung out of warm water applied over the belly. If nature ſeems to ſink, and the woman is greatly exhauſted with fatigue, a draught of generous wine, or ſome other cordial, may be given, but not otherwiſe. Theſe directions are ſufficient in natural labours; and in all

* Though the management of women in child-bed has been practised as an employment since the earliest accounts of time, yet it is still in most countries on a very bad footing. Few women think of following this employment till they are reduced to the necessity of doing it for bread. Hence not one in a hundred of them have any education, or proper knowledge of their business. It is true that Nature, if left to herself, will generally expel the *fœtus*; but it is equally true, that most women in child-bed, require to be managed with skill and attention, and that they are often hurt by the superstitious prejudices of ignorant and officious midwives. The mischief done in this way is greater than what is imagined; most of which might be prevented by allowing no woman to practice midwifry but such as are properly qualified. Were due attention paid to this, it would not only be the means of saving many lives, but would prevent the necessity of employing men in that indelicate and disagreeable branch of medicine, which is, on many accounts, more proper for the other sex.

ternatural caſes, a ſkilful ſurgeon or man-midwife, ht to be called as ſoon as poſſible.

After delivery, the woman ought to be kept as quiet caſy as poſſible *. Her food ſhould be light and n, as gruel, panado, &c. and her drink weak and di- ng. To this rule, however, there are many excep- ns. I have known ſeveral women, whoſe ſpirits could be ſupported in child-bed without ſolid food and ge- ous liquors; to ſuch, a glaſs of wine and a bit of cken muſt be allowed.

Sometimes an exceſſive hæmorrhage or flooding hap- ns after delivery. In this caſe the patient ſhould be l with her head low, kept cool, and be in all reſpects ated as for an exceſſive flux of the menſes. If the oding proves violent, linen cloths, which have been ung out of a mixture of equal parts of vinegar and ter, or red wine, ſhould be applied to the belly, the ns, and the thighs: theſe muſt be changed as they ow dry; and may be diſcontinued as ſoon as the flood- ; abates †.

If there be violent pains after delivery, the patient ght to drink plentifully of warm diluting liquors, as oat-gruel, or tea with a little ſaffron in it; and to take all broths, with carraway-ſeeds, or a bit of orange-peel them; an ounce of the oil of ſweet almonds may like- ſe be frequently taken in a cup of any of the above uors; and if the patient be reſtleſs, a ſpoonful of the up of poppies may now and then be mixed with a p of her drink. If ſhe be hot or feveriſh, one of the

* We cannot help taking notice of that ridiculous custom, which prevails in some parts of the country, of collecting numbers women together upon such occasions. These, instead of being ful, serve only to crowd the house, and obstruct the necessary ndants. Besides, they hurt the patient with their noise; and n, by their untimely and impertinent advice, do much mis- ef.

† In a violent flooding after delivery, I have seen very good effects n the following mixture: Take of penny-royal water, simple namon-water, and syrup of poppies, each two ounces, elixir of riol a drachm. Mix, and take two table-spoonfuls every two hours, oftener if necessary.

following powders may be taken in a cup of her uſual drink every five or ſix hours *.

An inflammation of the womb is a dangerous and not unfrequent diſeaſe after delivery. It is known by pains in the lower part of the belly, which are greatly increaſed upon touching; by the tenſion or tightneſs of the parts; great weakneſs; change of countenance; a conſtant fever; with a weak and hard pulſe; a ſlight delirium, or raving; ſometimes inceſſant vomiting; a hiccup; a diſcharge of reddiſh, ſtinking, ſharp water from the womb; an inclination to go frequently to ſtool; a heat and ſometimes total ſuppreſſion of urine.

This muſt be treated like other inflammatory diſorders, by bleeding and plentiful dilution. The drink may be thin gruel or barley-water; in a cup of which half a drachm of nitre may be diſſolved, and taken three or four times a-day. Clyſters of warm milk and water muſt be frequently adminiſtered; and the belly ſhould be fomented by cloths wrung out of warm water or by applying bladders filled with warm milk and water to it.

A ſuppreſſion of the lochia, or uſual diſcharges after delivery, and the milk fever, muſt be treated nearly in the ſame manner as the inflammation of the womb. In all theſe caſes the ſafeſt courſe is plentiful dilution, gentle evacuations, and fomentations of the parts affected. In the milk-fever, the breaſts may be embrocated with a little warm linſeed-oil, or the leaves of red cabbage may be applied to them. The child ſhould be often put to the breaſt, or it ſhould be drawn by ſome other perſon.

Nothing would tend more to prevent the milk-fever than putting the child early to the breaſt. The cuſtom of not allowing children to ſuck for the firſt two or

* Take of crab's claws prepared half an ounce, purified nitre two drachms, ſaffron powdered half a drachm; rub them together in a mortar, and divide the whole into eight or nine doſes.

When the patient is low ſpirited, or troubled with hyſterical complaints, ſhe ought to take frequently twelve or fifteen drops of the tincture of aſafœtida in a cup of penny-royal tea.

e days, is contrary to Nature and common ſenſe, very hurtful both to the mother and child.

Every mother who has milk in her breaſts, ought er to ſuckle her own child, or to have her breaſts fre- ntly drawn, at leaſt for the firſt month. This would vent many of the diſeaſes which prove fatal to women child-bed.

When an inflamation happens in the breaſt, attended th redneſs, hardneſs, and other ſymptoms of ſuppura- n the ſafeſt application is a poultice of bread and milk, tened with oil or freſh butter. This may be renew- twice a-day, till the tumour be either diſcuſſed or ought to ſuppuration. The uſe of repellents, in this e is very dangerous; they often occaſion fevers, and metimes cancers; whereas a ſuppuration is ſeldom at- nded with any danger, and has often the moſt ſaluta- effects.

When the nipples are fretted or chapped, they may anointed with a mixture of oil and bees-wax, or a tle powdered gum-arabic may be ſprinkled on them. have ſeen Hungary water applied to the nipples have very good effect. Should the complaint prove obſti- te, a cooling purge may be given, which generally re- oves it.

The miliary fever is a diſeaſe incident to women in ild-bed; but as it has been treated of already, we ſhall ke no farther notice of it. The celebrated Hoffman bſerves, That this fever of child-bed women might enerally be prevented, if they during their pregnancy ere regular in their diet, uſed moderate exerciſe, took ow and then a gentle laxative of manna, rhubarb, or ream of tartar; not forgetting to bleed in the firſt nonths, and avoid all ſharp air. When the labour is oming on, it is not to be haſtened with forcing medi- ines, which inflame the blood and humours, or put them nto unnatural commotions. Care ſhould be taken, after the birth, that the natural excretions proceed regularly: and if the pulſe be quick, a little nitrous powder, or ſome other cooling medicines, ſhould be adminiſtered.

The moſt fatal diſorder conſequent upon delivery is

the puerperal, or child-bed, fever. It generally makes its attack upon the ſecond or third day after delivery. Sometimes indeed it comes on ſooner, and at other times, though rarely, it does not appear before the fifth or ſixth day.

It begins, like moſt other fevers, with a cold or ſhivering fit, which is ſucceeded by reſtleſsneſs, pain of the head, great ſickneſs of the ſtomach, and bilious vomiting. The pulſe is generally quick, the tongue dry, and there is a remarkable depreſſion of ſpirits and loſs of ſtrength. A great pain is uſually felt in the back, hips and region of the womb; a ſudden change in the quantity or quality of the lochia alſo takes place; and the patient is frequently troubled with a teneſmus, or conſtant inclination to go to ſtool. The urine, which is very highly coloured, is diſcharged in ſmall quantity and generally with pain. The belly ſometimes ſwells to a conſiderable bulk, and becomes ſuſceptible of pains from the ſlighteſt touch. When the fever has continued for a few days, the ſymptoms of inflammation uſually ſubſide, and the diſeaſe acquires a more putrid form. At this period, if not ſooner, a bilious if not putrid looſeneſs, of an obſtinate and dangerous nature, comes on, and accompanies the diſeaſe through all its future progreſs.

There is not any diſeaſe that requires to be treated with more ſkill and attention than this; conſequently the beſt aſſiſtance ought always to be obtained as ſoon as poſſible. In women of a plethoric conſtitution, bleeding will generally be proper at the beginning; it ought, however, to be uſed with caution, and not to be repeated, unleſs where the ſigns of inflammation riſe high; in which caſe it will alſo be neceſſary to apply a bliſtering plaſter to the region of the womb.

During the rigour, or cold fit, proper means ſhould be uſed to abate its violence and ſhorten its duration. For this purpoſe, the patient may drink freely of warm diluting liquors, and, if low, may take now and then a cup of wine whey; warm applications to the extremities, as heated bricks, bottles or bladders filled with

arm water, and ſuch like, may alſo be uſed with ad-
ntage.

Emollient clyſters of milk and water, or of chicken
ater, ought to be frequently adminiſtered through the
urſe of the diſeaſe. Theſe prove beneficial, by pro-
oting a diſcharge from the inteſtines, and alſo by act-
g as a kindly fomentation to the womb and parts ad-
cent. Great care, however, is requiſite in giving
em on account of the tenderneſs of the parts in the
lvis at this time.

To evacuate the offending bile from the ſtomach, a
omit is generally given. But as this is apt to increaſe
e irritability of the ſtomach, already too great, it
ll be ſafer to omit it, and to give in its ſtead a gentle
xative, which will both tend to cool the body, and to
ocure a free diſcharge of the bile *.

The medicine which I have always found to ſucceed
ſt in this diſeaſe, is the ſaline draught. This, if fre-
ently repeated, will often put a ſtop to the vomiting,
d at the ſame time leſſen the violence of the fever. If
runs off by ſtool, or if the patient be reſtleſs, a few
ops of laudanum, or ſome ſyrup of poppies, may oc-
ſionally be given.

If the ſtools ſhould prove ſo frequent, as to weaken
d exhauſt the patient, a ſtarch clyſter, with thirty or
rty drops of laudanum in it, may be adminiſtered as
caſion ſhall require; and the drink may be rice water,
every Engliſh pint of which half an ounce of gum-
abic has been diſſolved. Should theſe fail, recourſe
uſt be had to Columbo-root, or ſome other ſtrong
tringent.

Though in general the food ought to be light, and
e drink diluting, yet when the diſeaſe has been long
otracted, and the patient is greatly ſpent by evacua-
ons, it will be neceſſary to ſupport her with nouriſhing
et, and generous cordials.

* Midwives ought to be very cautious in adminiſtering vomits or
rges to women in child-bed. I have known a woman who was re-
vering extremely well, thrown into the moſt imminent danger, by
trong purge which was given her by an officious midwife.

It was obſerved that this fever, after continuing for ſome time, often acquires a putrid form. In this caſe the Peruviau bark muſt be given, either by itſelf, or joined with cordials, as circumſtances may require. As the bark in ſubſtance will be apt to purge, it may be given in decoction or infuſion mixed with the tincture of roſes, or other gentle aſtringents: or a ſcruple of the extract of bark with half an ounce of the ſpirituous cinnamon-water, two ounces of common water, and ten drops of laudanum, may be made in a draught, and given every ſecond, third, or fourth hour, as ſhall be found neceſſary.

When the ſtomach will not bear any kind of nouriſhment, the patient may be ſupported for ſome time by clyſters of beef-tea or chicken-water.

To avoid this fever, every woman in child-bed ought to be kept perfectly eaſy; her food ſhould be light and ſimple, and her bed-chamber cool and properly ventilated. There is not any thing more hurtful to a woman in this ſituation than being kept too warm. She ought not to have her body bound too tight, nor to riſe too ſoon from bed, after delivery; catching cold is alſo to be avoided; a proper attention ſhould be paid to cleanlineſs.

To prevent the milk-fever, the breaſts ought to be frequently drawn; and if they are filled previous to the onſet of a fever, they ſhould, upon its firſt appearance, be drawn, to prevent the milk from becoming acrid, and its being abſorbed in this ſtate. Coſtiveneſs is likewiſe to be avoided. This will be beſt effected by the uſe of mild clyſters and a laxative diet.

We ſhall conclude our obſervations on child-bed women, by recommending to them, above all things, to beware of cold. Poor women, whoſe circumſtances oblige them to quit their bed too ſoon, often contract diſeaſes from cold, of which they never recover. It is a pity the poor are not better taken care of in this ſituation.

But the better ſort of women run the greateſt hazard from too much heat. They are generally kept in

ſort of bagnio for the firſt eight or ten days, and then reſſed out to ſee company. The danger of this conuct is obvious to every one.

The ſuperſtitious custom of obliging women to keep he houſe till they go to church, is likewiſe a very comnon cauſe of catchiug cold. All churches are damp nd moſt of them cold; conſequently there are the vey worſt places to which a woman can go to make her irſt viſit, after having been confined in a warm room or a month.

††† As in caſes of child-birth, profeſſional aſſiſtance s not always to be immediately procured, we have given ſuch inſtructions, in a ſubſequent part of this work, that the matron may be of great ſervice in caſe of need, or till profeſſional aid can be obtained.

OF BARRENNESS.

Barreneſs may be very properly reckoned among the diſeaſes of females, as few married women, who have not children, enjoy a good ſtate of health. It may proceed from various cauſes, as high-living, grief, relaxation, &c.; but it is chiefly owing to an obſtruction or irregularity of the menſtrual flux.

It is very certain that high-living vitiates the humours, and prevents fecundity. We ſeldom find barren women among the labouring poor, while nothing is more common among the rich and affluent. The inhabitants of every country are prolific in proportion to their poverty; and it would be an eaſy matter to adduce many inſtances of women, who, by their being reduced to live entirely upon milk and vegetable diet, have conceived and brought forth children, though they never had any before. Would the rich uſe the ſame ſort of food and exerciſe as the better ſort of peaſants, they would ſeldom have cauſe to envy their poor vaſſals and dependants the bleſſings of a numerous and healthy offſpring, while they pine in ſorrow for the want of even a ſingle heir to their extenſive domains.

Affluence begets indolence, which not only vitiates the humours, but induces a general relaxation of the ſolids; a ſtate highly unfavourable to procreation. To remove this, we would recommend the following courſe: Firſt, ſufficient exerciſe in the open air; ſecondly, a diet conſiſting chiefly of milk and vegetables *; thirdly, the uſe of aſtringent medicines, as ſteel, alum, dragon's blood, elixir of vitriol, the Spa or Tunbridge waters, Peruvian bark, &c.; and laſtly, above all, the cold bath.

Barrenneſs is often the conſequences of grief, ſudden fear, anxiety, or any of the paſſions which tend to obſtruct the menſtrual flux. When barrenneſs is ſuſpected to proceed from affections of the mind, the perſon ought to be kept as eaſy and cheerful as poſſible; all diſagreeable objects are to be avoided, and every method taken to amuſe and entertain the fancy.

The foregoing few and ſimple remarks, are all that are known in medicine of the cauſes and cure of barrenneſs. There is no ſituation in which women are ſo ready to liſten to the deluſions of quackery, or to anile receipts, than this, and none ſo dangerous. All theſe compoſitions are of an irritating nature, which will impoſe on the patient; while inſtead of removing the complaint they ruin the conſtitution; inſtead of ſtrengthening they enfeeble nature, and render the malady entirely incurable.

CHAP. XLIX.

DISEASES OF CHILDREN.

MISERABLE indeed is the lot of man in the ſtate of infancy! He comes into the world more helpleſs than any other animal, and ſtands much longer

* Dr. Cheyne avers, that want of children is oftener the fault of the male than of the female; and ſtrongly recommends a milk

eed of the care and protection of his parents; but
! this care is not always beſtowed upon him; and
n it is, he often ſuffers as much from improper ma-
ement as he would have done from neglect. Hence
officious care of parents, nurſes, and midwives, be-
es one of the moſt fruitful ſources of the diſorders
nfants †.

: muſt be obvious to every attentive perſon, that
firſt diſeaſes of infants ariſe chiefly from their bow-
Nor is this in the leaſt to be wondered at, as they
in a manner poiſoned with indigeſtible drugs and
roper diet as ſoon as they come into the world.
ry thing that the ſtomach cannot digeſt may be
ſidered as a poiſon; and unleſs it can be thrown up,
oided by ſtool, it muſt occaſion ſickneſs, gripes,
modic affections of the bowels, or what the good
nen call inward fits, and at laſt convulſions and
th.

s theſe ſymptoms evidently ariſe from ſomewhat
: irritates the inteſtines, doubtleſs the proper me-
d of cure muſt be to expel it as ſoon as poſſible.
e moſt ſafe and effectual method of doing this is by
tle vomits. Five or ſix grains of the powder of
acuanha may be mixed in two table ſpoonfuls of

vegetable diet to the former as well as to the latter; adding, that
friend Dr. Taylor, whom he calls the Milk-doctor of Croydon,
brought ſundry opulent families in his neighbourhood, who had
tinued ſome years after marriage without progeny, to have ſeveral
children, by keeping both parents for a conſiderable time to a
and vegetable diet.

Of the officious and ill judged care of midwives we ſhall adduce
one inſtance, viz. the common practice of torturing infants, by
eezing their breaſts, to draw off the milk, as they call it. Though
nall quantity of moiſture is generally found in the breaſts of infants,
as they are certainly not intended to give ſuck, this ought never
e drawn off. I have ſeen this cruel operation bring on hardneſs,
ammation, and ſuppuration of the breaſts, but never knew any ill
ſequences from its being omitted. When the breaſts are hard, the
y application that we would recommend is a ſoft poultice, or a lit-
of the diachylon plaſter, ſpread thin upon a bit of ſoft leather,
ut the ſize of half a crown, and applied over each nipple. Theſe
y be ſuffered to continue till the hardneſs diſappears.

water, and ſweetened with a little ſugar. A tea ſpoonful of this may be given to the infant every quarter of an hour till it operates; or, what will more certainly anſwer the purpoſe, a grain of emetic tartar may be diſſolved in three ounces of water, ſweetened with a little ſyrup, and given as above. Thoſe who are not fond of uſing the emetic tartar, may give ſix or ſeven drops of the antimonial wine in a tea ſpoonful of water or thin gruel. Small doſes of the ipecacuanha will be found more gentle than any of the above, and ought to be preferred.

Theſe medicines will not only cleanſe the ſtomach, but will generally likewiſe open the body. Should this however not happen, and if the child be coſtive, ſome gentle purge will be neceſſary; for this purpoſe, ſome manna and pulp of caſſia may be diſſolved in boiling water, and given in ſmall quantities till it operates; or, what will anſwer rather better, a few grains of magneſia alba may be mixed in any kind of food that is given to the child, and continued till it has the deſired effect. If theſe medicines be properly adminiſtered, and the child's belly and limbs frequently rubbed with a warm hand before the fire, they will ſeldom fail to relieve thoſe affections of the ſtomach and bowels from which infants ſuffer ſo much.

Theſe general directions include moſt of what can be done for relieving the internal diſorders of infants. They will likewiſe go a conſiderable way in alleviating thoſe which appear externally, as the raſh, gum, or fellon, &c. Theſe, as was formerly obſerved, are principally owing to too hot a regimen, and conſequently will be moſt commonly relieved by gentle evacuations. Indeed, evacuations of one kind or other, conſtitute a principal part of the medicine of infants, and will ſeldom, if adminiſtered with prudence, in any of their diſeaſes, fail to give relief.

OF THE MECONIUM.

The ſtomach and bowels of a new born infant are

d with a blackiſh coloured matter of the conſiſtence
yrup, commonly called the *meconium*. This is
rally paſſed ſoon after the birth by the mere effort
lature; in which caſe it is not neceſſary to give
infant any kind of medicine. But if it ſhould be
ined, or not ſufficiently carried off, a little manna,
nagneſia alba, may be given, as mentioned above;
f theſe ſhould not be at hand, a common ſpoonful
hey, ſweetened with a little honey, or raw ſugar,
anſwer the purpoſe.

The moſt proper medicine for expelling the meco-
n is the mother's milk, which is always at firſt of a
gative quality. Were children allowed to ſuck as
n as they ſhew an inclination for the breaſt, they
uld ſeldom have occaſion for medicines to diſcharge
meconium; but even where this is not allowed,
y ought never to have daubs of ſyrups, oils, and
er indigeſtible ſtuffs, crammed down their throats.

THE APHTHÆ, OR THRUSH.

The aphthæ are little white ulcers affecting the
ole inſide of the mouth, tongue, throat, and ſto-
ch of infants. Sometimes they reach through the
ole inteſtinal canal; in which caſe they are very
gerous, and often put an end to the infant's life.

If the aphthæ are of a pale colour, pellucid, few in
nber, ſoft, ſuperficial, and fall eaſily off, they are
dangerous; but if opake, yellow, brown, black,
ck, or running together, they ought to be dreaded.

It is generally thought that the aphthæ owe their
gin to acrid humours; we have reaſon, however, to
ieve, they are more frequently owing to too hot a
gimen both of the mother and child. It is a rare
ng to find a child who is not doſed with wine,
nch, cinnamon waters, or ſome other hot and infla-
ng liquors, almoſt as ſoon as it is born. It is well
own that theſe will occaſion inflammatory diſorders
en in adults; is it any wonder then that they ſhould

heat and inflame the tender bodies of infants, and ſo as it were, the whole conſtitution on a blaze?

The moſt proper medicines for the aphthæ are vomits, ſuch as have been already recommended, and gentle laxatives. Five grains of rhubarb, and half a drachm of magneſia alba, may be rubbed together, and divided into ſix doſes, one of which may be given to the infant every four or five hours till they operate. Theſe powders may either be given in the child's food, or a little of the ſyrup of pale roſes, and may be repeated as often as is found neceſſary to keep the body open. It is common in this caſe to adminiſter calomel; but as that medicine ſometimes occaſions gripes, it ought always to be given to infants with caution.

Many things have been recommended for gargling the mouth and throat in this diſeaſe; but it is not eaſy to apply theſe in very young children; we would therefore recommend it to the nurſe to rub the child's mouth frequently with a little borax and honey, or with the following mixture—take fine honey an ounce, borax a drachm, burnt alum half a drachm, roſe water two drachms, mix them together. A very proper application in this caſe, is a ſolution of ten or twelve grains of white vitriol in eight ounces of barley water. Theſe may be applied with the finger, or by means of a bit of ſoft rag tied to the end of a probe.

OF ACIDITIES.

The food of children being for the moſt part of an aceſcent nature, it readily turns ſour upon the ſtomach, eſpecially if the body be any way diſordered. Hence moſt diſeaſes of children are accompanied with evident ſigns of acidity, as green ſtools, gripes, &c. Theſe appearances have induced many to believe that all the diſeaſes of children were owing to an acid abounding in the ſtomach and bowels; but whoever conſiders the matter attentively, will find that theſe ſymptoms of acidity are oftener the effect than the cauſe of their diſeaſes.

Nature evidently intended that the food of children should be acescent; and unless the body be disordered, or the digestion hurt from some other cause, we will venture to say that the acescent quality of their food is seldom injurious to them. Acidity, however, is often a symptom of disorders in children; and, as it is sometimes a troublesome one, we shall point out the method of relieving it.

When green stools, gripes, purgings, sour smells, &c. shew that the bowels abound with an acid, the child should have a little small broth, with light white bread in it, and should have sufficient exercise, in order to promote the digestion. It has been customary in this case to give the pearl julep, chalk, crabs eyes, and other testaceous powders. These, indeed, by their absorbent quality may correct the acidity; but they are attended with this inconvenience, that they are apt to lodge in the bowels, and occasion costiveness, which may prove very hurtful to the infant. For this reason they should never be given unless mixed with purgative medicines, as rhubarb, manna, or such like.

The best medicine which we know, in all cases of acidity, is that fine insipid powder called magnesia alba. It purges, and at the same time corrects the acidity; by which means it not only removes the disease, but carries off its cause. It may be given in any kind of food, or a mixture, as recommended in the Appendix §.

When an infant is troubled with gripes, it ought not at first to be dosed with brandy, spiceries, and other hot things, but should have its body opened with an emollient clyster, or the medicine mentioned above; and at the same time a little brandy may be rubbed on its belly with a warm hand before the fire. I have seldom seen this fail to ease the gripes of infants. If it should happen, however, not to succeed, a little brandy or other spirits may be mixed with thrice the quantity of warm water, and a tea spoonful of it given fre-

§ See Appendix, *Laxative absorbent Mixture.*

quently till the infant be eaſier. Sometimes a little peppermint water will anſwer this purpoſe very well.

GALLING AND EXCORIATION.

Theſe are very troubleſome to children. They happen chiefly about the groin and wrinkles of the neck, under the arms, behind the ears, and in other parts that are moiſtened by the ſweat or urine.

As theſe complaints are in great meaſure owing to want of cleanlineſs, the moſt effectual means of preventing them are, to waſh the parts frequently with cold water, to change the linen often, and in a word, to keep the child in all reſpects thoroughly clean. When this is not ſufficient, the excoriated parts may be ſprinkled with abſorbent or drying powders; as burnt hartſhorn, tutty, chalk, crabs' claws prepared, and the like. When the parts affected are very ſore, and tend to a real ulceration, is will be proper to add a little ſugar of lead to the powders, or to anoint the place with the camphorated ointment. If the parts be waſhed with ſpring water, in which a little white vitriol has been diſſolved, it will dry and heal them very powerfully. One of the beſt applications for this purpoſe is to diſſolve ſome fuller's earth in a ſufficient quantity of hot water, and after it has ſtood till it is cold, to rub it gently upon the galled parts once or twice a day.

STOPPAGE OF THE NOSE.

The noſtrils of infants are often plugged up with a groſs mucus, which prevents their breathing freely, and likewiſe renders it difficult for them to ſuck or ſwallow.

Some in this caſe order, after a ſuitable purge, two or three grains of white vitriol diſſolved in half an ounce of marjoram water, and filtered, to be applied now and then to the noſtrils with a linen rag. Wedelius ſays, if two grains of white vitriol, and the

ſame quantity of elaterium, be diſſolved in half an ounce of marjoram water, and applied to the noſe as above directed, that it brings away the mucus without ſneezing.

In obſtinate caſes theſe things may be tried; but I have never found any thing neceſſary, beſides rubbing the noſe at bed time with a little ſweet oil, or freſh butter. This reſolves the filth, and renders the breathing more free ‡.

OF VOMITING.

From the delicate ſtate of children, and the great ſenſibility of their organs, a vomiting or looſeneſs may be adduced by any thing that irritates the nerves of the ſtomach and inteſtines. Hence theſe diſorders are much more common in childhood than in the more advanced periods of life. They are ſeldom, however, dangerous, and ought never to be conſidered as diſeaſes, unleſs when they are violent, or continue ſo long as to exhauſt the ſtrength of the patient.

Vomiting may be excited by an over quantity of food; by food that is of ſuch a nature as to irritate the nerves of the ſtomach too much; or by the ſenſibility of the nerves being ſo much increaſed as to render them unable to bear the ſtimulus of even the mildeſt element.

When vomiting is occaſioned by too much food, it ought to be promoted, as the cure will depend upon cleanſing the ſtomach. This may be done either by a few grains of ipecacuanha, or a weak ſolution of emetic tartar, as mentioned before. When it is owing to food of an acrid or irritating quality, the diet ought to be changed, and aliment of a milder nature ſubſtituted in its ſtead.

When vomiting proceeds from an increaſed degree of ſenſibility, or too great an irritability of the nerves

‡ Some nurſes remove this complaint by ſucking the child's noſe. This is by no means a cleanly operation; but when nurſes have the reſolution to do it, I am far from diſcouraging the practice.

of the ſtomach, ſuch medicines as have a tendency to brace and ſtrengthen that organ, and to abate its ſenſibility, muſt be uſed. The firſt of theſe intentions may be anſwered by a ſlight infuſion of the Peruvian bark, with the addition of a little rhubarb and orange peel; and the ſecond by the ſaline draughts, to which a few drops of liquid laudanum may occaſionally be added.

In obſtinate vomitings the operation of internal medicines may be aſſiſted by aromatic fomentations made with wine, applied warm to the pit of the ſtomach; or the uſe of the ſtomach plaſter, with the addition of a little theriaca.

OF A LOOSENESS.

A looſeneſs may be generally reckoned ſalutary when the ſtools are ſour, ſlimy, green, or curdled. It is not the diſcharge, but the production of ſuch ſtools, which ought to be remedied. Even where the purging is thin and watery, it ought not to be checked too ſuddenly, as it often proves critical, eſpecially when the child has caught cold, or an eruption on the ſkin has diſappeared. Sometimes an evacuation of this kind ſucceeds a humid ſtate of the atmoſphere, in which caſe it may alſo prove of advantage, by carrying off a quantity of watery humours, which would otherwiſe tend to relax the habit.

As the principal intention of the cure of a looſeneſs is to evacuate the offending matter, it is cuſtomary to give the patient a gentle vomit of ipecacuanha, and afterwards to exhibit ſmall and frequent doſes of rhubarb; interpoſing abſorbent medicines to mitigate the acrimony of the humours. The beſt purge, in this caſe, is magneſia alba. It is at the ſame time abſorbent and laxative, and operates without exciting gripes.

The antimonial wine, which acts bot has an emetic and purge, is alſo an excellent medicine in this caſe. By being diluted with water, it may be proportioned to the weakeſt conſtitution, and not being diſagreeable

to the palate, it may be repeated as often as occaſion requires. Even one doſe will frequently mitigate the diſeaſe, and pave the way for the uſe of abſorbents. If however the patient's ſtrength will permit, the medicine ought to be repeated every ſix or eight hours, till the ſtools begin to aſſume a more natural appearance; afterwards a longer ſpace may be allowed to intervene between the doſes. When it is neceſſary to repeat the medicine frequently, the doſe ought always to be a little increaſed; as its efficacy is generally diminiſhed by uſe.

Some, upon the firſt appearance of a looſeneſs, fly immediately to the uſe of abſorbent medicines and aſtringents. If theſe be adminiſtered before the offending humours are diſcharged, though the diſeaſe may appear to be mitigated for a little time, it ſoon afterwards breaks forth with greater violence, and often proves fatal. After proper evacuations, however, theſe medicines may be adminiſtered with conſiderable advantage.

Should any gripings or reſtleſſneſs remain after the ſtomach and bowels have been cleanſed, a tea ſpoonful of the ſyrup of poppies may be given in a little ſimple cinnamon water three or four times a day till theſe ſymptoms have ceaſed.

OF ERUPTIONS.

Children, while on the breaſt, are ſeldom free from eruptions of one kind or other. Theſe, however, are not often dangerous, and ought never to be dried up but with the greateſt caution. They tend to free the bodies of infants from hurtful humours, which, if retained, might produce fatal diſorders.

The eruptions of children are chiefly owing to improper food and neglect of cleanlineſs. If a child be ſtuffed at all hours with food, that its ſtomach is not able to digeſt, ſuch food, not being properly aſſimilated, inſtead of nouriſhing the body, fills it with groſs humours. Theſe muſt either break out in form of

eruptions upon the ſkin, or remain in the body, and occaſion fevers and other internal diſorders. That neglect of cleanlineſs is a very great cauſe of eruptive diſorders muſt be obvious to every one. The children of the poor, and of all who deſpiſe cleanlineſs, are almoſt conſtantly found to ſwarm with vermin, and are generally covered with ſcab, itch, and other eruptions.

When eruptions are the effect of improper food, or want of cleanlineſs, a proper attention to theſe alone will generally be ſufficient to remove them. If this ſhould not be the caſe, ſome drying medicines will be neceſſary. When they are applied, the body ought at the ſame time to be kept open, and cold is carefully to be avoided. We know no medicine that is more ſafe for drying up cutaneous eruptions than ſulphur, provided it be prudently uſed. A little of the flowers of ſulphur may be mixed with freſh butter, oil, or hog's lard, and the parts affected frequently touched with it.

The moſt obſtinate of all the eruptions incident to children are, the tinea capitis, or ſcabbed head, and chilblains. The ſcabbed head is often exceedingly difficult to cure, and ſometimes indeed the cure proves worſe than the diſeaſe. I have frequently known children ſeized with internal diſorders, of which they died ſoon after the ſcabbed heads had been healed by the application of drying medicines ‡. The cure ought

‡ I some time ago saw a very striking instance of the danger of substituting drying medicines in the place of cleanliness and wholesome food, in the Foundling Hospital at Ackworth, where the children were grievously afflicted with scabby heads, and other cutaneous disorders. Upon enquiry, it was found that very little attention was paid either to the soundness or propriety of their provisions, and that cleanliness was totally neglected; accordingly it was advised that they should have more wholesome food, and be kept thoroughly clean. This advice, however, was not followed. It was too troublesome to the servants, superintendants, &c. The business was to be done by medicine; which was accordingly attempted, but had nearly proved fatal to the whole house. Fevers, and other internal disorders, immediately appeared, and at length a putrid dysentery, which proved so infectious that it carried off a great many of the children, and spread over a considerable part of the neighbouring country.

always firſt to be attempted by keeping the head very clean, cutting off the hair, combing and bruſhing away the ſcabs, &c. If this is not ſufficient, let the head be ſhaved once a week, waſhed daily with ſoap ſuds, and gently anointed with a liniment made of train oil eight ounces, red precipitate, in fine powder, one drachm. And if there be proud fleſh, it ſhould be touched with a bit of blue vitriol, or ſprinkled with a little burnt alum. While theſe things are doing, the patient muſt be confined to a regular light diet, the body muſt be kept gently open, and cold, as far as poſſible, ought to be avoided. To prevent any bad conſequences from ſtopping this diſcharge, it will be proper, eſpecially in children of a groſs habit, to make an iſſue in the neck or arm, which may be kept open till the patient becomes more ſtrong, and the conſtitution be ſomewhat mended.

Chilblains commonly attack children in cold weather. They are generally occaſioned by the feet or hands being long wet or cold, and afterwards ſuddenly heated. When children are cold, inſtead of taking exerciſe to warm themſelves gradually, they run to the fire. This occaſions a ſudden rarefaction of the humours, and an infraction of the veſſels; which being often repeated, the veſſels are at laſt over diſtended, and forced to give way.

To prevent it, violent cold and ſudden heat muſt be equally avoided. When the parts begin to look red and ſwell, the patient ought to be purged, and to have the affected parts frequently rubbed with muſtard and brandy, or ſomething of a warming nature. They ought likewiſe to be covered with flannel, and kept warm and dry. Some apply warm aſhes between cloths to the ſwelled parts, which frequently help to reduce them. When there is a ſore, it muſt be dreſſed with Turner's cerate, the ointment of tutty, the plaſter of cerus, or ſome other drying ointment. Theſe ſores are indeed troubleſome, but ſeldom dangerous. They generally heal as ſoon as the warm weather ſets in.

OF THE CROUP.

Children are often ſeized very ſuddenly with this diſeaſe, which if not quickly relieved, proves mortal. It is known by various names in different parts of Britain. On the eaſt coaſt of Scotland it is called the Croup. On the weſt they call it the Chock, or Stuffing. In ſome parts of England, where I have obſerved it, the good women call it Riſing of the Lights. It ſeems to be a ſpecies of aſthma, attended with very acute and violent catarrhal ſymptoms.

This diſeaſe generally prevails in cold and wet ſeaſons. It is moſt common upon the ſea coaſt, and in low marſhy countries. Children of a groſs and lax habit are moſt liable to it. I have ſometimes known it hereditary. It generally attacks children in the night, after having been much expoſed to damp cold eaſterly winds through the day. Damp houſes, wet feet, thin ſhoes, wet clothes, or any thing that obſtructs the perſpiration, may occaſion the croup.

It is attended with a frequent pulſe, quick and laborious breathing, which is performed with a peculiar kind of croaking noiſe, that may be heard at a conſiderable diſtance. The voice is ſharp and ſhrill, and the face is generally much fluſhed, though ſometimes it is of a livid colour.

When a child is ſeized with the above ſymptoms, his feet ſhould immediately be put into warm water. He ought likewiſe to be bled *, and to have a laxative clyſter adminiſtered as ſoon as poſſible. He ſhould be made to breathe over the ſteams of warm water and vinegar; or an emollient decoction, and emollient cataplaſms or fomentations may be applied round his neck. If the ſymptoms do not abate, a bliſtering plaſter muſt be applied round the neck, or between the ſhoulders, and the child may take frequently a table ſpoon-

* In this disease bleeding is not always proper; but in very full habits it must certainly be of use.

al of the following julep—Take penny royal water hree ounces, ſyrup of althea and poppies, each one unce; mix them together.

Aſafœtida is found to have a good effect in this caſe. t may be both given in form of a clyſter, and taken by the mouth. Two drachms of aſafœtida may be diſ- olved in an ounce of Mindererus's ſpirit, and three unces of penny royal water;—a table ſpoonful of the mixture may be given every hour, or oftener, if the patient's ſtomach be able to bear it. If the child cannot be brought to take this medicine, two drachms of the aſafœtida may be diſſolved in a common clyſter, and ad- miniſtered every ſix or eight hours, till the violence of the diſeaſe abates †.

To prevent a return of the diſorder, all thoſe things which occaſion it muſt be carefully avoided, as wet feet, cold, damp, eaſterly winds, &c. Children who have had frequent returns of this diſeaſe, or whoſe conſtitutions ſeem to diſpoſe them to it, ought to have their diet properly regulated; all food that is viſcid or hard of digeſtion, and all crude, raw, traſhy fruits, are to be avoided. They ought likewiſe to have a drain conſtantly kept open in ſome part of their body, by means of a ſeton or iſſue. I have ſometimes known a Burgundy pitch plaſter, worn continually between the ſhoulders for ſeveral years, have a very happy effect in preventing the return of this dreadful diſorder.

† I was lately favoured with a letter from Dr. William Turnbull in London, a phyſician of great experience, and who from his former ſituation on the north east coast of England, had many opportunities of obſerving the ſymptoms and progreſs of this diſeaſe. He obſerves he never found bliſtering of any ſervice, and recommends cataplaſms of garlic, camphor, and Venice treacle, to be applied to the throat and ſoles of the feet; he likewiſe recommends boluſes of camphor, caſtor, valerian root, ſalt of hartſhorn, and muſk, adapted to the age, ſtrength, &c. of the patient; after which he adviſes two ſpoonfuls of the following decoction—Take of garlic and diſtilled vinegar, each an ounce, hyſſop water eight ounces; beat up the ingredients together, gradually mixing the water, and adding three ounces of honey. Let the whole be ſimmered over a gentle fire, and afterwards ſtrained for uſe.

OF TEETHING.

Dr. Arbuthnot obſerves, above a tenth part of infants die in teething, by ſymptoms proceeding from the irritation of the tender nervous parts of the jaws, occaſioning inflammations, fevers, convulſions, gangrenes, &c. Theſe ſymptoms are in a great meaſure owing to the great delicacy and exquiſite ſenſibility of the nervous ſyſtem at this time of life, which is too often increaſed by an effeminate education. Hence it comes to paſs, that children who are delicately brought up, always ſuffer moſt in teething, and often fall by convulſive diſorders.

About the ſixth or ſeventh month the teeth generally begin to make their appearance; firſt, the inciſores, or fore teeth; next, the canini, or dog teeth; and laſtly, the molares or grinders. About the ſeventh year there comes a new ſet; and about the twentieth, the two inner grinders, called dentes ſapientiæ, the teeth of wiſdom.

Children about the time of cutting their teeth ſlaver much, and have generally a looſeneſs. When the teething is difficult, eſpecially when the dog teeth begin to make their way through the gums, the child has ſtartings in his ſleep, tumours of the gums, watchings, gripes, green ſtools, the thruſh, fever, difficult breathing, and convulſions.

Difficult teething requires nearly the ſame treatment as an inflammatory diſeaſe. If the body be bound it muſt be opened either by emollient clyſters or gentle purgatives; as manna, magneſia alba, rhubarb, ſenna, or the like. The food ſhould be light, and in ſmall quantity; the drink plentiful, but weak and diluting, as infuſions of balm, or of the lime tree flowers; to which about a third or fourth part of milk may be added.

If the fever be high, bleeding will be neceſſary; but this in very young children ought always to be ſparingly performed. It is an evacuation which they

bear the worſt of any. Purging, vomiting, or ſweating agree much better with them, and are generally more beneficial. Harris, however, obſerves, that when an inflammation appears, the phyſician will labour in vain, if the cure be not begun with applying a leech under each ear. If the child be ſeized with convulſion fits, a bliſtering paſter may be applied between the ſhoulders, or one behind each ear.

Sydenham ſays, that in fevers occaſioned by teething, he never found any remedy ſo effectual as two, three or four drops of ſpirits of hartſhorn in a ſpoonful of ſimple water, or other convenient vehicle, given every four hours. The number of doſes may be four, five, or ſix. I have often preſcribed this medicine with ſucceſs, but always found a larger doſe neceſſary. It may be given from five drops to fifteen or twenty, according to the age of the child, and when coſtiveneſs does not not forbid it, three or four drops of laudanum may be added to each doſe.

In Scotland, it is very common, when children are cutting their teeth, to put a ſmall Burgundy pitch plaſter between their ſhoulders. This generally eaſes the tickling cough which attends teething, and is by no means an uſeleſs application. When the teeth are cut with difficulty, it ought to be kept on during the whole time of teething. It may be enlarged as occaſion requires, and ought to be renewed at leaſt once a fortnight.

Several things have been recommended for rubbing the gums, as oils, mucilages, &c.; but from theſe much is not to be expected. If any thing of this kind is to be uſed, we would recommend a little fine honey, which may be rubbed on with the finger three or four times a day. Children are generally at this time diſpoſed to chew whatever they get into their hands. For this reaſon they ought never to be without ſomewhat that will yield a little to the preſſure of their gums, as a cruſt of bread, a wax candle, a bit of liquorice root, or ſuch like.

With regard to cutting the gums, we have ſeldom

known it of any great benefit. In obſtinate caſes, however, it ought to be tried. It may be performed by the finger nail, the edge of a ſixpenny piece that is worn thin, or any ſharp body which can be with ſafety introduced into the mouth; but the lancet in a skilful hand, is certainly the moſt proper.

In order to render the teething leſs difficult, parents ought to take care that their children's food be light and wholeſome, and that their nerves be braced by ſufficient exerciſe without doors, the uſe of the cold bath, &c. Were theſe things duly regarded, they would have a much better effect than teething necklaces, or other nonſenſical amulets, worn for that purpoſe.

OF THE RICKETS.

This diſeaſe generally attacks children between the age of nine months and two years. It appeared firſt in England about the time when manufactures began to flouriſh, and ſtill prevails moſt in towns where the inhabitants follow ſedentary employments, by which means they neglect either to take proper exerciſe themſelves, or to give it to their children.

CAUSES.——One cauſe of the rickets is diſeaſed parents. Mothers of a weak relaxed habit, who neglect exerciſe, and live upon weak watery diet, can neither be expected to bring forth ſtrong and healthy children, or to be able to nurſe them, after they are brought forth. Accordingly we find, that the children of ſuch women generally die of the rickets, the ſcrophula, conſumptions, or ſuch like diſeaſes. Children begotten by men in the decline of life, who are ſubject to the gout, gravel, or other chronic diſeaſes, or who have been often afflicted with the venereal diſeaſe in their youth, are likewiſe very liable to the rickets.

Any diſorder that weakens the conſtitution or relaxes the habit of children, as the ſmall pox, meaſles, teething, the hooping cough, &c. diſpoſes them to this diſeaſe. It may likewiſe be occaſioned by improper diet,

as food that is either too weak and watery, or ſo viſcid that the ſtomach cannot digeſt it.

Bad nurſing is the chief cauſe of this diſeaſe. When the nurſe is either diſeaſed, or has not enough of milk to nouriſh the child, it cannot thrive. But children ſuffer oftener by want of care in nurſes, than want of food. Allowing an infant to lie or ſit too much, or not keeping it thoroughly clean in its clothes, has the moſt pernicious effects.

The want of free air is likewiſe very hurtful to children in this reſpect. When a nurſe lives in a cloſe ſmall houſe, where the air is damp and confined, and is too indolent to carry her child abroad into the open air, it will hardly eſcape this diſeaſe. A healthy child ſhould always be in motion unleſs when aſleep; if it be ſuffered to lie or ſit, inſtead of being toſſed and dandled about, it will not thrive.

SYMPTOMS.—At the beginning of this diſeaſe the child's fleſh grows ſoft and flabby, its ſtrength is diminiſhed, it loſes its wonted cheerfulneſs, looks more grave and compoſed than is natural for its age, and does not chuſe to be moved. The head and belly become too large in proportion to the other parts, the face appears dull and the complexion florid. Afterwards the bones begin to be affected, eſpecially in the more ſoft and ſpungy parts. Hence the wriſts and ancles become thicker than uſual, the ſpine or back bone puts on an unnatural ſhape, the breaſt is likewiſe often deformed, and the bones of the arms and legs grow crooked. All theſe ſymptoms vary according to the violence of the diſeaſe. The pulſe is generally quick, but feeble, the appetite and digeſtion for the moſt part bad, the teeth come ſlowly and with difficulty, and they often rot and fall out afterwards. Ricketty children generally have great acuteneſs of mind, and an underſtanding above their years. Whether this is owing to their being more in the company of adults than other children, or to the preternatural enlargement of the brain, is not material.

REGIMEN.——As this diſeaſe is always attended

with evident ſigns of weakneſs and relaxation, our chief aim in the cure muſt be to brace and ſtrengthen the ſolids, and to promote digeſtion and the due preparation of the fluids. Theſe important ends will be beſt anſwered by wholeſome nouriſhing diet, ſuited to the age and ſtrength of the patient, open dry air, and ſufficient exerciſe. If the child has a bad nurſe, who either neglects her duty, or does not underſtand it, ſhe ſhould be changed. If the ſeaſon be cold, the child ought to be kept cool, as ſweating is apt to weaken it, and too great a degree of cold has the ſame effect. The limbs ſhould be rubbed frequently with a warm hand, and the child kept as cheerful as poſſible.

The diet ought to be dry and nouriſhing, as good bread, roaſted fleſh, &c. Biſcuit is generally reckoned the beſt bread, and pigeons, pullets, veal, rabbits, or mutton roaſted or minced, are the moſt proper fleſh. If the child be too young for fleſh meats, he may have rice, millet, or pearl barley, boiled with raiſins, to which may be added a little wine and ſpice. His drink may be good claret, mixed with an equal quantity of water. Thoſe who cannot afford claret, may give the child now and then a wine glaſs of mild ale, or good porter.

MEDICINE.——Medicines are here of little avail. The diſeaſe may often be cured by the nurſe, but ſeldom by the phyſician. In children of a groſs habit, gentle vomits, and repeated purges of rhubarb, may ſometimes be of uſe, but they will ſeldom carry off the diſeaſe; that muſt depend chiefly upon ſuch things as brace and ſtrengthen the ſyſtem; for which purpoſe, beſides the regimen mentioned above, we would recommend the cold bath, eſpecially in the warm ſeaſon. It muſt however be uſed with prudence, as ſome rickety children cannot bear it. The beſt time for uſing the cold bath is in the morning, and the child ſhould be well rubbed with a dry cloth immediately after he come out of it. If the child ſhould be weakened by the cold bath, it muſt be diſcontinued.

Sometimes iſſues have been found beneficial in this diſeaſe. They are peculiarly neceſſary for children who abound with groſs humours. An infuſion of the Peruvian bark in wine or ale would be of ſervice, were it poſſible to bring children to take it. We might here mention many other medicines which have been recommended for the rickets, but as there is far more danger in truſting to theſe than in neglecting them altogether, we chooſe rather to paſs them over, and to recommend a proper regimen as the thing chiefly to be depended on.

OF CONVULSIONS.

Though more children are ſaid to die of convulſions than of any other diſeaſe, yet they are for the moſt part only a ſymptom of ſome other malady. Whatever greatly irritates or ſtimulates the nerves, may occaſion convulſions. Hence infants whoſe nerves are eaſily affected, are often thrown into convulſions by any thing that irritates the alimentary canal; likewiſe by teething, ſtrait clothes, the approach of the ſmall pox, meaſles, or other eruptive diſeaſes.

When convulſions proceed from an irritation of the ſtomach or bowels, whatever clears them of their acrid contents, or renders theſe mild and inoffenſive, will generally perform a cure; wherefore, if the child be coſtive, the beſt way will be to begin with a clyſter, and afterwards to give a gentle vomit, which may be repeated occaſionally, and the body in the mean time kept open by gentle doſes of magneſia alba, or ſmall quantities of rhubarb mixed with the powder of crab's claws.

Convulſions which precede the eruption of the ſmall pox or meaſles, generally go off upon theſe making their appearance. The principal danger in this caſe ariſes from the fears and apprehenſions of thoſe who have the care of the patient. Convulſions are very alarming, and ſomething muſt be done to appeaſe the affrighted parents, nurſes, &c. Hence the unhappy infant often undergoes bleeding, bliſtering, and ſeve-

ral other operations, to the great danger of its life, when a little time, bathing the feet in warm water, and throwing in a mild clyſter, would have ſet all to rights.

When convulſion fits ariſe from the cutting of teeth, beſides gentle evacuations, we would recommend bliſtering, and the uſe of antiſpaſmodic medicines, as the tincture of ſoot, aſafœtida, or caſtor. A few drops of any of theſe may be mixed in a cup of white wine whey, and given occaſionally.

When convulſions proceed from any external cauſe, as the preſſure occaſioned by ſtrait clothes or bandages, &c. theſe ought immediately to be removed, though in this caſe taking away the cauſe will not always remove the effect; yet it ought always to be done. It is not likely that the patient will recover, as long as the cauſe which firſt gave riſe to the diſorder continues to act.

When a child is ſeized with convulſions without having any complaint in the bowels, or ſymptoms of teething; or any raſh or other diſcharge that has been ſuddenly dried up; we have reaſon to conclude that it is a primary diſeaſe, and proceeds immediately from the brain. Cauſes, however, of this kind, happen but ſeldom, which is very fortunate, as little can be done to relieve the unhappy patient. When a diſeaſe proceeds from an original fault in the formation or ſtructure of the brain itſelf, we cannot expect that it ſhould yield to medicine. But as this is not always the cauſe, even of convulſions which proceed immediately from the brain, ſome attempts ſhould be made to remove them. The chief intention to be purſued for this purpoſe, is to make ſome derivation from the head, by bliſtering, purging, and the like. Should theſe fail, iſſues or ſetons may be put in the neck, or between the ſhoulders.

OF WATER IN THE HEAD.

Though water in the head, or a dropſy in the brain, may affect adults as well as children, yet as the latter

re more peculiarly liable to it, we thought it would be moſt proper to place it among the diſeaſes of infants.

CAUSES.——A dropſy of the brain may proceed from injury done to the brain itſelf by falls, blows, or the like; it may likewiſe proceed from an original laxity or weakneſs of the brain; from ſcirrhous tumours or excreſcences within the ſkull: a thin watery ſtate of the blood; a diminiſhed ſecretion of urine; a ſudden check of the perſpiration; and laſtly, from tedious and lingering diſeaſes, which waſte and conſume the patient.

SYMPTOMS.——This diſeaſe has at firſt the appearance of a ſlow fever; the patient complains of a pain in the crown of his head, or over his eyes; he ſhuns the light; is ſick, and ſometimes vomits; his pulſe is irregular, and ſometimes low; though he ſeems heavy and dull, yet he does not ſleep; he is ſometimes delirious, and frequently ſees objects double; towards the end of this commonly fatal diſeaſe, the pulſe becomes more frequent, the pupils are generally dilated, the cheeks flushed, the patient becomes comatoſe, and convulſions enſue.

MEDICINE.——No medicine has hitherto been found ſufficient to carry off a dropſy of the brain. It is laudable, however, to make ſome attempts, as time or chance may bring many things to light, of which at preſent we have no idea. The medicines generally uſed are, purges of rhubarb or jalap, with calomel, and bliſtering plaſters applied to the neck or back part of the head. To which we would beg leave to add diuretics, or medicines which promote the ſecretion of urine, ſuch as are recommended in the common dropſy. A diſcharge from the noſe ought likewiſe to be promoted by cauſing the patient to ſnuff the powder of aſarum, white helebore, or the the like.

Some practitioners have of late pretended to cure this diſeaſe by the uſe of mercury. I have not been ſo happy as to ſee any inſtance of a cure being performed

in a confirmed dropſy of the brain; but in ſo deſperate a malady every thing deſerves a trial †.

The writers on the diſeaſes of children have, under the ſhow of preciſion, muſtered ſuch a catalogue as cannot fail to be alarming to parents. They have directed the application of medicine upon all occaſions; whereas a proper treatment of the child, which we have endeavoured to inculcate, will render theſe in general unneceſſary. The milk of the mother is at once the beſt food and phyſic, and if ſhe take care of her own health by a proper diet and regimen, the child will eſcape thoſe complaints which are often, in a great meaſure, occaſioned by the drugs it ſwallows. Exerciſe in the open air, and the regular uſe of the cold bath, will be a complete preſervative againſt all the conſequences of a relaxed and nervous ſyſtem. The ſkin and body thus braced, will be neither liable to colds, nor in a great meaſure to external contagion; or where an infectious diſeaſe does not attack him, the purity of the habit will deſtroy its malignity; and the only infantile malady reſpecting which any particular precaution need be taken, is the ſmall pox, the proceſs of which is certain and ſafe, and always at the command of the parent.

CHAP. L.

OF SURGERY.

TO deſcribe all the operations of ſurgery, and to point out the different diſeaſes in which theſe operations are neceſſary, would extend this article far beyond the

† One reason why this disease is seldom or never cured, may be, that it is seldom known till too far advanced to admit of a remedy. Did parents watch the first symptoms, and call a physician in due time, I am inclined to think that something might be done. But these symptoms are not yet sufficiently known, and are often mistaken even by physicians themselves. Of this I lately saw a striking instance in a patient, attended by an eminent practitioner in this city, who had all along mistaken the disease for teething.

limits ſet to it; we muſt therefore confine our obſervations to ſuch caſes as moſt generally occur, and in which proper aſſiſtance is either not asked, or not always to be obtained.

Though an acquaintance with the ſtructure of the human body is indiſpenſably neceſſary to qualify a man for being an expert ſurgeon, yet many things may be done to ſave the lives of their fellow men in emergencies by thoſe who are no adepts in anatomy. It is amazing with what facility the peaſants daily perform operations upon brute animals, which are not of a leſs difficult nature than many of thoſe performed on the human ſpecies, yet they ſeldom fail of ſucceſs.

Indeed every man is in ſome meaſure a ſurgeon, whether he will or not. He feels an inclination to aſſiſt his fellow men in diſtreſs, and accidents happen every hour which give occaſion to exerciſe this feeling. The feelings of the heart, however, when not directed by the judgment, are apt to miſlead. Thus one, by a raſh attempt to ſave his friend, may ſometimes deſtroy him, while another, for fear of doing amiſs, ſtands ſtill and ſees his boſom friend expire, without ſo much as attempting to relieve him, even when the means are in his power. As every good man would wiſh to ſteer a courſe different from either of theſe, it will no doubt be agreeable to him to know what ought to be done upon ſuch emergencies.

OF BLEEDING.

No operation of ſurgery is ſo frequently neceſſary as bleeding; it ought therefore to be very generally underſtood. But though practiſed by midwives, gardeners, &c. we have reaſon to believe that very few know when it is proper. Even phyſicians themſelves have been ſo much the dupes of theory in this article, as to render it the ſubject of ridicule. It is, however, an operation of great importance, and muſt, when ſeaſonably and properly performed, be of ſingular ſervice to thoſe in diſtreſs.

Bleeding is proper at the beginning of all inflammatory fevers, as pleuriſies, peripneumonies, &c. It is likewiſe proper in all topical inflammations, as thoſe of the inteſtines, womb, bladder, ſtomach, kidneys, throat, eyes, &c. as alſo in the aſthma, ſciatic pains, coughs, head achs, rheumatiſms, the apoplexy, epilepſy, and bloody flux. After falls, blows, bruiſes, or any violent hurt received either externally or internally, bleeding is neceſſary. It is likewiſe neceſſary for perſons who have have had the misfortune to be ſtrangled, drowned, ſuffocated with foul air, the fumes of metal, or the like. In a word, whenever the vital motions have been ſuddenly ſtopped from any cauſe whatever, except in ſwoonings occaſioned by mere weakneſs or hyſteric affections, it is proper to open a vein. But in all diſorders proceeding from a relation of the ſolids, and an impoveriſhed ſtate of the blood, as dropſies, cacochymies, &c. bleeding is improper.

Bleeding for topical inflammations ought always to be performed as near the part affected as poſſible. When this can be done with a lancet, it is to be preferred to any other method; but where a vein cannot be found, recourſe muſt be had to leeches or cupping.

The quantity of blood to be let muſt always be regulated by the ſtrength, age, conſtitution, manner of life, and other circumſtances relating to the patient. It would be ridiculous to ſuppoſe that a child could bear to loſe as much blood as a grown perſon, or that a delicate lady ſhould be bled to the ſame extent as a robuſt man.

From whatever part of the body blood is to be let, a bandage muſt be applied between that part and the heart. As it is often neceſſary, in order to raiſe the vein, to make the bandage pretty tight, it will be proper in ſuch caſes as ſoon as the blood begins to flow, to ſlacken it a little. The bandage out to be applied at leaſt an inch and a half from the place where the wound is intended to be made.

Perſons not ſkilled in anatomy ought never to bleed in a vein that lies over an artery or a tendon, if they can avoid it. The former may eaſily be known from its pulſation or beating, and the latter from its feeling hard or tight like a whipcord under the thumb.

It was formerly a rule, even among thoſe who had the character of being regular practitioners, to bleed their patients in certain diſeaſes till they fainted. Surely a more ridiculous rule could not be propoſed. One perſon will faint at the very ſight of a lancet, while another will loſe almoſt the whole blood of his body before he faints. Swooning depends more upon the ſtate of the mind than upon the body; beſides it may often be occaſioned or prevented by the manner in which the operation is performed.

Children are generally bleed with leeches. This, though ſometimes neceſſary, is a very troubleſome and uncertain practice. It is impoſſible to know what quantity of blood is taken away by leeches; beſides, the bleeding is often very difficult to ſtop, and the wounds are not eaſily healed. Would thoſe who practiſe bleeding take a little more pains, and accuſtom themſelves to bleed children, they would not find it ſuch a difficult operation as they imagine.

Certain hurtful prejudices with regard to bleeding ſtill prevail among the country people. They talk for inſtance of head veins, heart veins, breaſt veins, &c. and believe that bleeding in theſe will certainly cure all diſeaſes of the parts from whence they are ſuppoſed to come, without conſidering that all the blood veſſels ariſe from the heart, and return to it again; for which reaſon, unleſs in topical inflammations, it ſignifies very little from what part of the body blood is taken. But this, though a fooliſh prejudice, is not near ſo hurtful as the vulgar notion that the firſt bleeding will perform wonders. This belief makes them often poſtpone the operation when neceſſary, in order to reſerve it for ſome more important occaſion, and when they think themſelves in extreme danger, they fly to it for relief, whether it be proper or not. Bleeding at certain ſtated periods or ſeaſons has likewiſe bad effects.

It is a common notion that bleeding in the feet draws the humours downwards, and conſequently cures diſorders of the head and other ſuperior parts; but we have already obſerved that, in all topical affections, the blood ought to be drawn as near the part as poſſible. When it is neceſſary, however, to bleed in the foot or hand, as the veins are ſmall, and the bleeding is apt to ſtop too ſoon, the part ought to be immerſed in warm water, and kept there until a ſufficient quanity of blood be let.

We ſhall not ſpend time in deſcribing the manner of performing this operation; that will be better learned by example than precept. Twenty pages of deſcription would not convey ſo juſt an idea of the operation as ſeeing it once performed by an expert hand. Neither is it neceſſary to point out the different parts of the body from whence blood may be let, as the arm, foot, forehead, temples, neck, &c. Theſe will readily occur to every intelligent perſon, and the foregoing obſervations will be ſufficient for determining which of them is moſt proper upon any particular occaſion. In all caſes where the intention is only to leſſen the general maſs of blood, the arm is the moſt commodious part of the body in which the operation can be performed.

OF INFLAMMATIONS AND ABSCESSES.

From whatever cauſe an inflammation proceeds, it muſt terminate either by diſperſion, ſuppuration, or gangrene. Though it is impoſſible to foretel with certainty in which of theſe ways any particular inflammation will terminate, yet a probable conjecture may be formed with regard to the event, from a knowledge of the patient's age and conſtitution. Inflammations happening in a ſlight degree upon colds, and without any previous indiſpoſition, will moſt probably be diſperſed; thoſe which follow cloſe upon a fever, or happen to perſons of a groſs habit of body, will generally ſuppurate; and thoſe which attack very old people, or perſons of a dropſical habit, will have a ſtrong tendency to gangrene.

If the inflammation be ſlight, and the conſtitution ſound, the diſperſion ought always to be attempted. This will be beſt promoted by a ſlender diluting diet, plentiful bleeding, and repeated purges. The part itſelf muſt be fomented, and if the ſkin be very tenſe, it may be embrocated with a mixture of three fourths of ſweet oil, and one fourth of vinegar, and afterwards covered with a piece of wax plaſter.

If, notwithſtanding theſe applications, the ſymptomatic fever increaſes, and the tumour becomes larger, with violent pain and pulſation, it will be proper to promote the ſuppuration. The beſt application for this purpoſe is a ſoft poultice, which may be renewed twice a day. If the ſuppuration proceeds but ſlowly, a raw onion cut ſmall or bruiſed may be ſpread upon the poultice. When the abſceſs is ripe or fit for opening, which may eaſily be known from the thinneſs of the ſkin in the moſt prominent part of it, fluctuation of matter which may be felt under the finger, and, generally ſpeaking, an abatement of the pain, it may be opened with a lancet, or by means of cauſtic.

The laſt way in which an inflammation terminates, is in a gangrene or mortification, the approach of which may be known by the following ſymptoms; the inflammation loſes its redneſs, and becomes duskiſh or livid; the tenſion of the skin goes off, and it feels flabby; little bladders filled with ichor of different colours ſpread all over it; the tumour ſubſides, and from a duskiſh complexion becomes black; a quick low pulſe, with cold clammy ſweats, are the immediate forerunners of death.

When theſe ſymptoms firſt appear, the part ought to be dreſſed with London treacle, or a cataplaſm made of lixivium and bran. Should the ſymptoms become worſe, the part muſt be ſcarified, and afterwards dreſſed with baſilicum ſoftened with oil of turpentine. All the dreſſings muſt be applied warm. With regard to internal medicines, the patient muſt be ſupported with generous cordials, and the Peruvian bark exhibited in as large doſes as the ſtomach will bear it. If the morti-

fied parts ſhould ſeparate, the wound would become a common ulcer, and muſt be treated accordingly.

This article includes the treatment of all thoſe diſeaſes which in different parts of the country go by the names of biles, impoſthumes, whitloes, &c. They are all abſceſſes in conſequence of a previous inflammation, which, if poſſible, ought to be diſcuſſed; but when this cannot be done, the ſuppuration ſhould be promoted, and the matter be diſcharged by an inciſion, if neceſſary; afterwards the ſore may be dreſſed with yellow baſilicum, or ſome other digeſtive ointment.

OF WOUNDS.

No part of medicine has been more miſtaken than the treatment or cure of wounds. Mankind in general believe that certain herbs, ointments, and plaſters, are poſſeſſed of wonderful healing powers, and imagine than no wound can be cured without the application of them. It is, however, a fact, that no external application whatever contributes towards the cure of a wound, any other way than by keeping the parts ſoft, clean, and defending them from the external air, which may be as effectually done by dry lint, as by the moſt populous applications, while it is exempt from many of the bad conſequences attending them.

The ſame obſervation holds with reſpect to internal applications. Theſe only promote the cure of wounds as far as they tend to prevent a fever, or to remove any cauſe that might inſtruct or impede the operations of Nature. It is Nature alone that cures wounds. All that art can do is to remove obſtacles, and to put the parts in ſuch a condition as is the moſt favourable to Nature's efforts.

With this ſimple view we ſhall conſider the treatment of wounds, and endeavour to point out ſuch ſteps as ought to be taken to facilitate their cure.

The firſt thing to be done, when a perſon has received a wound, is to examine whether any foreign body be lodged in it, as wood, ſtone, iron, lead, glaſs,

dirt, bits of cloth, or the like. Theſe if poſſible ought to be extracted, and the wound cleaned before any dreſſings be applied. When that cannot be effected with ſafety, on account of the patient's weakneſs or loſs of blood, they muſt be ſuffered to remain in the wound, and afterwards extracted when he is more able to bear it.

When a wound penetrates into any of the cavities of the body, as the breaſt, the bowels, &c. or where any conſiderable blood veſſel is cut, a skilful ſurgeon ought immediately to be called, otherwiſe the patient may loſe his life. But ſometimes the diſcharge of blood is ſo great, that if it be not ſtopped, the patient may die, even before a ſurgeon, though at no great diſtance, can arrive. In this caſe, ſomething muſt be done by thoſe who are preſent. If the wound be in any of the limbs, the bleeding may generally be ſtopped by applying a tight ligature or bandage round the member a little above the wound. The beſt method of doing this is to put a ſtrong broad garter round the part, but ſo ſlack as eaſily to admit a ſmall piece of ſtick to be put under it, which muſt be twiſted in the ſame manner as a countryman does a cart rope to ſecure his loading, till the bleeding ſtops. Whenever this is the caſe, he muſt take care to twiſt it no longer, as ſtraining it too much might occaſion an inflammation of the parts, and endanger a gangrene.

In parts where this bandage cannot be applied, various other methods may be tried to ſtop the bleeding, as the application of ſtyptics, aſtringents, &c. Cloths dipped in a ſolution of blue vitriol in water, or the ſtyptic water of the diſpenſatories may be applied to the wound. When theſe cannot be obtained, ſtrong ſpirits of wine may be uſed. Some recommend the agaric † of oak as preferable to any of the other ſtyp-

† Dr. Tiſſot in his Advice to the People, gives the following directions for gathering, preparing and applying the agaric——Gather in autumn (ſays he) while the weather laſts, the agaric of the oak; which is a kind of fungus or excreſcence iſſuing from the wood of that tree. It conſiſts at firſt of four parts, which preſent themſelves

tics; and indeed it deſerves conſiderable encomiums. It is eaſily obtained, and ought to be kept in every family, in caſe of accidents. A piece of it muſt be laid upon the wound, and covered with a good deal of lint, above which a bandage may be applied ſo tight as to keep it firmly on.

Though ſpirits, tinctures, and hot balſams may be uſed, in order to ſtop the bleeding when it is exceſſive, they are improper at other times. They do not promote but retard the cure, and often change a ſimple wound into an ulcer. People imagine becauſe hot balſams congeal the blood, and ſeem as it were to ſolder up the wound, that they therefore heal it; but this is only a deception. They may, indeed, ſtop the flowing by ſearing the mouths of the veſſels; but by rendering the parts callous, they obſtruct the cure.

In ſlight wounds which do not penetrate much deeper than the ſkin, the beſt application is a bit of the common black ſticking plaſter. This keeps the ſides of the wound together, and prevents the air from hurting it, which is all that is neceſſary. When a wound penetrates deep, it is not ſafe to keep its lips quite cloſe; this keeps in the matter, and is apt to make the wound feſter. In this caſe the beſt way is to fill the wound with ſoft lint, commonly called caddis. It muſt, however, not be ſtuffed too hard, otherwiſe it will do hurt. The caddis may be covered with a cloth dipped in oil, or ſpread with the common wax plaſter ‡, and the whole muſt be kept on by a proper bandage.

ſucceſſively. 1. The outward rind or ſkin, which may be thrown away. 2. The part immediately under this rind, which is the beſt of all. This is to be beat well with a hammer till it becomes ſoft and pliable; this is the only preparation it requires, and a ſlice of it of a proper ſize is to be applied directly over the burſting open blood veſſels. It conſtringes and brings them cloſe together, ſtops the bleeding, and generally falls off at the end of two days. 3. The third part adhering to the ſecond, may ſerve to ſtop the bleeding from the ſmaller veſſels; and the fourth and laſt part may be reduced to powder, as conducing to the ſame purpoſe.—Where the agaric cannot be had, ſponge may be uſed in its ſtead. It muſt be applied in the ſame manner, and has nearly the ſame effects.

‡ See Appendix, *Wax Plaſter*.

We ſhall not ſpend time in deſcribing the different bandages that may be proper for wounds in different parts of the body; common ſenſe will generally ſuggeſt the moſt commodious method of applying a bandage; beſides, deſcriptions of this kind are not eaſily underſtood or remembered.

The firſt dreſſing ought to continue on at leaſt two days; after which it may be removed, and freſh lint applied as before. If any part of the firſt dreſſing ſticks ſo cloſe as not to be removed with eaſe or ſafety to the patient, it may be allowed to continue, and freſh lint dipped in ſweet oil laid over it. This will ſoften it, ſo as to make it come off eaſily at next dreſſing. Afterwards the wound may be dreſſed twice a day in the ſame manner till it be quite healed. Thoſe who are fond of ſalves or ointments may, after the wound is become very ſuperficial, dreſs it with the yellow baſilicum *; and if fungous, or what is called proud fleſh, ſhould riſe in the wound, it may be checked, by mixing with the ointment a little burnt alum or red precipitate of mercury.

When a wound is greatly inflamed, the moſt proper application is a poultice of bread and milk, ſoftened with a little ſweet oil or freſh butter. This muſt be applied inſtead of a plaſter, and ſhould be changed twice a day.

If the wound be large, and there is reaſon to fear an inflammation, the patient ſhould be kept in a very low diet. He muſt abſtain from fleſh, ſtrong liquors, and every thing that is of a heating nature. If he be of a full habit, and has loſt but little blood from the wound, he muſt be bled; and if the ſymptoms be urgent, the operation may be repeated. But when the patient has been greatly weakened by loſs of blood from the wound, it will be dangerous to bleed him, even though a fever ſhould enſue. Nature ſhould never be too far exhauſted. It is always more ſafe to allow her to ſtruggle with

* See Appendix, *Yellow Basilicum.*

the diſeaſe in her own way, than to ſink the patient's ſtrength by exceſſive evacuations.

Wounded perſons ought to keep perfectly quiet and eaſy. Every thing that ruffles the mind, or moves the paſſions, as love, anger, fear, exceſſive joy, &c. are very hurtful. They ought above all things to abſtain from venery. The body ſhould be kept gently open, either by laxative clyſters, or by a cool vegetable diet, as roaſted apples, ſtewed prunes, boiled ſpinage and ſuch like.

OF BURNS.

In light burns, which do not break the ſkin, it is cuſtomary to hold the part near the fire for a competent time, to rub it with ſalt, or to lay a compreſs upon it, dipped in ſpirits of wine or brandy. But when the burn has penetrated ſo deep, as to bliſter or break the ſkin, it muſt be dreſſed with ſome of the liniment for burns mentioned in the Appendix, or with the emollient and drying ointment, commonly called Turner's cerate †. This may be mixed with an equal quantity of freſh olive oil, and ſpread upon a ſoft rag, and applied to the part affected. When this ointment cannot be had, an egg may be beat up with about an equal quantity of the ſweeteſt ſalad oil. This will ſerve very well, till a proper ointment can be prepared. When the burning is very deep, after the firſt two or three days. it ſhould be dreſſed with equal parts of yellow baſilicum and Turner's cerate mixed together.

When the burn is violent, or has occaſioned a high degree of inflammation, and there is reaſon to fear a gangrene or mortification, the ſame means muſt uſed to prevent, as are recommended in other violent inflammations. The patient, in this caſe muſt live low; and drink freely of weak diluting liquors. He muſt likewiſe be bled, and have his body kept open. But if the burnt

† See Appendix, *Turner's Cerate.*

parts ſhould become livid or black, with other ſymptoms of mortification, it will be neceſſary to bathe them frequently with warm camphorated ſpirits of wine, tincture of myrrh, or other antiſeptics, mixed with a decoction of the bark. In this caſe the bark muſt likewiſe be taken internally, and the patient's diet muſt be more generous.

As example teaches better than precept, I ſhall relate the treatment of the moſt dreadful caſe of this kind that has occurred in my practice. A middle aged man, of a good conſtitution, fell into a large veſſel full of boiling water, and miſerably ſcalded about one half of his body;—as his clothes were on, the burning in ſome parts was very deep before they could be got off. For the firſt two days the ſcalded parts had been frequently anointed with a mixture of lime water and oil, which is a very proper application for recent burnings. On the third day, when I firſt ſaw him, his fever was high and his body coſtive, for which he was bled, and had an emollient clyſter adminiſtered. Poultices of bread and milk, ſoftened with freſh butter, were likewiſe applied to the affected parts, to abate the heat and inflammation. His fever ſtill continuing high, he was bled a ſecond time, was kept ſtrictly on the cooling regimen, took the ſaline mixture with ſmall doſes of nitre, and had an emollient clyſter adminiſtered once a-day. When the inflammation began to abate, the parts were dreſſed with a digeſtive compoſed of brown cerate and yellow baſilicum. When any black ſpots appeared, they were ſlightly ſcarified, and touched with the tincture of myrrh; and to prevent their ſpreading, the Peruvian bark was adminiſtered. By this courſe the man was ſo well in three weeks as to be able to attend his buſineſs.

OF BRUISES.

Bruiſes are generally productive of worſe conſequences than wounds. The danger from them does not appear immediately, by which means it often happens

that they are neglected. It is needleſs to give any definition of a diſeaſe ſo univerſally known; we ſhall therefore proceed to point out the mode of treating it.

In ſlight bruiſes it will be ſufficient to bathe the part with warm vinegar, to which a little brandy or rum may occaſionally be added, and to keep cloths wet with this mixture conſtantly applied to it. This is more proper than rubbing it with brandy, ſpirits of wine, or other ardent ſpirits, which are commonly uſed in ſuch caſes.

In ſome parts of the country the peaſants apply to a recent bruiſe a cataplaſm of freſh cow dung. I have often ſeen this cataplaſm applied to violent contuſions, occaſioned by blows, falls, bruiſes, and ſuch like, and never knew it fail to have a good effect.

When a bruiſe is very violent, the patient ought immediately to be bled, and put upon a proper regimen. His food ſhould be light and cool, and his drink weak, and of an opening nature; as whey ſweetened with honey, decoctions of tamarinds, barley, cream-tartar whey, and ſuch like. The bruiſed part may be bathed with vinegar and water, as directed above; and a poultice made by boiling crumbs of bread, elder flowers, and camomile flowers, in equal quantities of vinegar and water, applied to it. The poultice is peculiarly proper when a wound is joined to the bruiſe. It may be renewed two or three times a-day.

As the ſtructure of the veſſels is totally deſtroyed by a violent bruiſe, there often enſues a great loſs of ſubſtance, which produces an ulcerous ſore very difficult to cure. If the bone be affected the ſore will not heal before an exfoliation takes place; that is, before the diſeaſed part of the bone ſeparates, and comes out through the wound. This is often a very ſlow operation, and may even require ſeveral years to be compleated. Hence it happens that theſe ſores are frequently miſtaken for the king's evil, and treated as ſuch, though in fact they proceed ſolely from the injury which the ſolid parts received from the blow.

Patients in this ſituation are peſtered with different vices. Every one who ſees them propoſes a new medy, till the ſore is ſo much irritated with various d oppoſite applications, that it is often at length ren-red abſolutely incurable. The beſt method of ma-ging ſuch ſores is, to take care that the patient's nſtitution does not ſuffer by confinement or impro-r medicine, and to apply nothing to them but ſome nple ointment ſpread upon ſoft lint, over which a oultice of bread and milk, with boiled camomile flow-s, or the like, may be put, to nouriſh the part, and ep it ſoft and warm. Nature, thus aſſiſted, will nerally in time operate a cure, by throwing off the ſeaſed parts of the bone, after which the ſore ſoon als.

OF ULCERS.

Ulcers may be the conſequence of wounds, bruiſes, impoſthumes improperly treated; they may like-iſe proceed from an ill ſtate of the humours, or what ay be called a bad habit of body.

In the latter caſe, they ought never to be haſtily ied up, otherwiſe it may prove fatal to the patient. lcers happen moſt commonly in the decline of life; d perſons who neglect exerciſe, and live groſsly, are oſt liable to them. They might often be prevented y retrenching ſome part of the ſolid food, or by open-ig artificial drains, as iſſues, ſetons, or the like.

An ulcer may be diſtinguiſhed from a wound by its iſcharging a thin watery humour, which is often ſo crid as to inflame and corrode the ſkin, by the hard-eſs and perpendicular ſituation of its ſides or edges, y the time of its duration, &c.

It requires conſiderable ſkill to be able to judge whe-ner or not an ulcer ought to be dried up. In general, ll ulcers which proceed from a bad habit of body, ould be ſuffered to continue open, at leaſt till the onſtitution has been ſo far changed by proper regimen r the uſe of medicine, that they ſeem diſpoſed to heal

of their own accord. Ulcers which are the effect of malignant fevers, or other acute diſeaſes, may generally be healed with ſafety after the health has been reſtored for ſome time. The cure ought not, however, to be attempted too ſoon, nor at any time without the uſe of purging medicines and a proper regimen. When wounds or bruiſes have, by a wrong treatment, degenerated into ulcers, if the conſtitution be good, they may generally be healed with ſafety. When ulcers either accompany chronical diſeaſes, or come in their ſtead, they muſt be cautiouſly healed. If an ulcer conduces to the patient's health, from whatever cauſe it proceeds, it ought not to be healed; but if on the contrary, it waſtes the ſtrength, and conſumes the patient by a ſlow fever, it ſhould be healed as ſoon as poſſible.

We would earneſtly recommend a ſtrict attention to theſe particulars to all who have the misfortune to labour under this diſorder, particularly perſons in the decline of life; as we have frequently known people throw away their lives by the want of it, while they were extolling, and generouſly rewarding thoſe whom they ought to have looked upon as their executioners.

The moſt proper regimen for promoting the cure of ulcers, is to avoid all ſpices, ſalted and high ſeaſoned food, all ſtrong liquors, and to leſſen the uſual quantity of fleſh meat. The body ought to be kept gently open by a diet conſiſting chiefly of cooling laxative vegetables, and by drinking butter milk, whey ſweetened with honey, or the like. The patient ſhould be cheerful, and take as much exerciſe as he can eaſily bear.

When the bottom and ſides of an ulcer ſeem hard and callous, they may be ſprinkled twice a day with a little red precipitate of mercury, and afterwards dreſſed with the yellow baſilicum ointment. Sometimes it it will be neceſſary to have the edges of the ulcer ſcarified with the lancet.

Lime water has been frequently known to have very happy effects in the cure of obſtinate ulcers. It may be uſed in the ſame manner as directed for the ſtone and gravel.

My late learned and ingenious friend Dr. White, ſtrongly recommends the uſe of the ſolution of corroſive ſublimate of mercury in brandy, for the cure of obſtinate ill conditioned ulcers. I have frequently found this medicine, when given according to the doctor's directions, prove very ſucceſsful. The doſe is a table ſpoonful night and morning; at the ſame time waſhing the ſore twice or thrice a day with it. In a letter which I had from the doctor a little before his death, he informed me——That he obſerved waſhing the ſore twice a day with the ſolution of a triple ſtrength, was very beneficial ‡.

A fiſtulous ulcer can ſeldom be cured without an operation. It muſt either be laid open, ſo as to have its callous parts deſtroyed by ſome corroſive application, or they muſt be entirely cut away by the knife; but as this operation requires the hand of an expert ſurgeon, there is no occaſion to deſcribe it. Ulcers about the anus are moſt apt to become fiſtulous, and are very difficult to cure. Some indeed pretend to have found Ward's fiſtula paſte very ſucceſsful in this complaint. It is not a dangerous medicine, and being eaſily procured, it may deſerve a trial; but as theſe ulcers generally proceed from an ill habit of body, they will ſeldom yield to any thing except a long courſe of regimen, aſſiſted by medicines, which are calculated to correct that particular habit, and to produce an almoſt total change in the conſtitution.

CHAP. LI.

OF DISLOCATIONS.

WHEN a bone is moved out of its place or articulation, ſo as to impede its proper functions, it is ſaid to be luxated or diſlocated. As this often hap-

‡ In ulcers of the lower limbs great benefit is often received from tight rollers, or wearing a laced ſtocking, as this prevents the flux of humours to the ſores, and diſpoſes them to heal.

pens to perſons in ſituations where no medical aſſiſtance can be obtained, by which means limbs, and even lives, are frequently loſt, we ſhall endeavour to point out the method of reducing the moſt common luxations, and thoſe which require immediate aſſiſtance. Any perſon of common ſenſe and reſolution, who is preſent when a diſlocation happens, may often be of more ſervice to the patient, than the moſt expert ſurgeon can after the ſwelling and inflammation have come on. When theſe are preſent, it is difficult to know the ſtate of the joint, and dangerous to attempt a reduction; and by waiting till they are gone off, the muſcles become ſo relaxed, and the cavity filled up, that the bone can never afterwards be retained in its place.

A recent diſlocation may generally be reduced by extenſion alone, which muſt always be greater or leſs according to the ſtrength of the muſcles which move the joint, the age, robuſtneſs, and other circumſtances, of the patient. When the bone has been out of its place for any conſiderable time, and a ſwelling or inflammation has come on, it will be neceſſary to bleed the patient, and after fomenting the part, to apply ſoft poultices with vinegar to it for ſome time before the reduction is attempted.

All that is neceſſary after the reduction, is to apply cloths dipped in vinegar, or camphorated ſpirits of wine to the part, and to keep it perfectly eaſy. Many bad conſequences proceed from the neglect of this rule. A diſlocation ſeldom happens without the tendons and ligaments of the joint being ſtretched and ſometimes torn. When theſe are kept eaſy till they recover their ſtrength and tone, all goes on very well; but if the injury be increaſed by too frequent an exertion of the parts, no wonder if they be found weak and diſeaſed ever after.

DISLOCATION OF THE JAW.

The lower jaw may be luxated by yawning, blows, falls, chewing hard ſubſtances, or the like. It is eaſily

known from the patient's being unable to ſhut his mouth, or to eat any thing, as the teeth of the under jaw do not correſpond with thoſe of the upper; beſides, the chin either hangs down or is thrown toward one ſide, and the patient is neither able to ſpeak diſtinctly, nor to ſwallow without conſiderable difficulty.

The uſual method of reducing a diſlocated jaw, is to ſet the patient upon a low ſtool, ſo as an aſſiſtant may hold the head firm by preſſing it againſt his breaſt. The operator is then to thruſt his two thumbs, being firſt wrapped up with linen cloths, that they may not ſlip, as far back into the patient's mouth as he can, while his fingers are applied to the jaw externally. After he has got firm hold of the jaw, he is to preſs it ſtrongly downwards and backwards, by which means the elapſed heads of the jaw may be eaſily puſhed into their former cavities.

The peaſants in ſome parts of the country have a peculiar way of performing this operation. One of them puts a handkerchief under the patient's chin, then turning his back to that of the patient, pulls him up by the chin ſo as to ſuſpend him from the ground. This method often ſucceeds, but we think it a dangerous one, and therefore recommend the former.

DISLOCATION OF THE NECK.

The neck may be diſlocated by falls, violent blows, or the like. In this caſe, if the patient receives no aſſiſtance, he ſoon dies, which makes people imagine the neck was broken; it is however for the moſt part only partially diſlocated, and may be reduced by almoſt any perſon who has reſolution enough to attempt it. A complete diſlocation of the neck is inſtantaneous death.

When the neck is diſlocated, the patient is immediately deprived of all ſenſe and motion; his neck ſwells, his countenance appears bloated, his chin lies upon his breaſt, and his face is generally turned towards one ſide.

To reduce this diſlocation the unhappy perſon ſhould immediately be laid upon his back upon the

ground, and the operator muſt place himſelf behind him, ſo as to be able to lay hold of his head with both hands, while he makes a reſiſtance by placing his knees againſt the patient's ſhoulders. In this poſture he muſt pull the head with conſiderable force, gently twiſting it at the ſame time, if the face be turned to one ſide, till he perceives that the joint is replaced, which may be known from the noiſe which the bones generally make when going in, the patient's beginning to breathe, and the head continuing in its natural ſtate.

This is one of thoſe operations which it is more eaſy to perform than deſcribe. I have known inſtances of its being happily performed, even by women, and often by men of no medical education. After the neck is reduced, the patient ought to be bled, and ſhould be ſuffered to reſt for ſome days, till the parts recover their proper tone.

DISLOCATION OF THE RIBS.

As the articulation of the ribs with the back bone is very ſtrong, they are not often diſlocated. It does, however, ſometimes happen, which is a ſufficient reaſon for our taking notice of it. When a rib is diſlocated either upwards or downwards, in order to replace it, the patient ſhould be laid upon his belly on a table, and the operator muſt endeavour to puſh the head of the bone into its proper place. Should this method not ſucceed, the arm of the diſordered ſide may be ſuſpended over a gate or ladder, and while the ribs are thus ſtretched aſunder, the heads of ſuch as are out of place may be thruſt into their former ſituation.

Thoſe diſlocations wherein the heads of the ribs are forced inwards, are both more dangerous and the moſt difficult to reduce, as neither the hand nor any inſtrument can be applied internally to direct the luxated heads of the ribs; almoſt the only thing that can be done is, to lay the patient upon his belly over a caſk, or ſome gibbous body, and to move the fore part of the rib inward towards the back, ſometimes ſhaking it;

by this means the heads of the luxated ribs may ſlip into their former place.

DISLOCATION OF THE SHOULDER.

The humerus or upper bone in the arm may be diſlocated in various directions: it happens, however, moſt frequently downwards, but very ſeldom directly upwards. From the nature of its articulation, as well as from its expoſure to eternal injuries, this bone is the moſt ſubject to diſlocation of any in the body. A diſlocation of the humerus may be known by a depreſſion or cavity on the top of the ſhoulder, and an inability to move the arm. When the diſlocation is downward or forward, the arm is elongated, and a ball or lump is perceived under the arm-pit; but when it is backward, there appears a protuberance behind the ſhoulder, and the arm is thrown forwards towards the breaſt.

The uſual method of reducing diſlocations of the ſhoulder is to ſeat the patient upon a low ſtool, and to cauſe an aſſiſtant to hold his body ſo that it may not give way to the extenſion, while another lays hold of the arm a little above the elbow, and gradually extends it. The operator then puts a napkin under the patient's arm, and cauſes it to be tied behind his own neck: by this, while a ſufficient extenſion is made, he lifts up the head of the bone, and with his hands directs it into its proper place. There are various machines invented for facilitating this operation, but the hand of an expert ſurgeon is always more ſafe. In young and delicate patients, I have generally found it a very eaſy matter to reduce the ſhoulder, by extending the arm with one hand, and thruſting in the head of the bone with the other. In making the extenſion, the arm ought always to be a little bent.

DISLOCATION OF THE ELBOW.

The bones of the fore-arm may be diſlocated in any direction. When this is the caſe, a protuberance may

be obſerved on that ſide of the arm towards which the bone is puſhed, from which, and the patient's inability to bend his arm, a diſlocation of this joint may eaſily be known.

Two aſſiſtants is generally neceſſary for reducing a diſlocation of the elbow; one of them muſt lay hold of the arm above, and the other below the joint, and make a pretty ſtrong extenſion, while the operator returns the bones into their proper place. Afterwards the arm muſt be bent, and ſuſpended for ſome time with a ſling about the neck.

Luxations of the wriſt and fingers are to be reduced in the ſame manner as thoſe of the elbow, viz. by making an extenſion in different directions, and thruſting the head of the bone in its place.

DISLOCATION OF THE THIGH.

When the thigh bone is diſlocated forward and downward, the knee and foot are turned out, and the leg is longer than the other; but when it is diſplaced backward, it is uſually puſhed upward at the ſame time, by which means the limb is ſhortened, and the foot is turned inward.

When the thigh-bone is diſplaced forward and downward, the patient, in order to have it reduced, muſt be laid upon his back, and made faſt by bandages, or held by aſſiſtants, while by others an extenſion is made by means of ſlings fixed about the bottom of the thigh a little above the knee. While the extenſion is made the operator muſt puſh the head of the bone outward, till it gets into the ſocket. If the diſlocation be outward, the patient muſt be laid upon his face, and, during the extenſion, the head of the bone muſt be puſhed inward.

Diſlocations of the knees, ancles, and toes, are reduced much in the ſame manner as thoſe of the upper extremities, viz. by making an extenſion in oppoſite directions, while the operator replaces the bones. In many caſes, however, the extention alone is ſufficient, and the bone will ſlip into its place, merely by pulling

the limb with a ſufficient force. It is not hereby meant, that force alone is ſufficient for the reduction of diſlocations. Skill and addreſs will often ſucceed better than force. I have known a diſlocation of the thigh reduced by one man, after all the force that could be uſed by ſix had proved ineffectual.

CHAP. LII.

OF BROKEN BONES, &c.

THERE is, in moſt country villages, ſome perſon who pretends to the art of reducing fractures. Though in general ſuch perſons are very ignorant, yet ſome of them are very ſucceſsful; which evidently proves, that a ſmall degree of learning, with a ſufficient ſhare of common ſenſe and a mechanical head, will enable a man to be uſeful in this way. We would however adviſe people never to employ ſuch operators, when an expert and ſkilful ſurgeon can be had: but when that is impracticable, they muſt be employed; we ſhall therefore recommend the following hints to their conſideration:—

When a large bone is broken, the patient's diet ought in all reſpects to be the ſame as in an inflammatory fever. He ſhould likewiſe be kept quiet and cool, and his body open by emollient clyſters; or, if theſe cannot be conveniently adminiſtered, by food that is of an opening quality; as ſtewed prunes, apples boiled in milk, boiled ſpinnage, and the like. It ought, however, to be here remarked, that perſons who have been accuſtomed to live high, are not all of a ſudden to be reduced to a very low diet. This might have fatal effects. There is often a neceſſity for indulging even bad habits, in ſome meaſure, where the nature of the diſeaſe might require a different treatment.

It will generally be neceſſary to bleed the patient immediately after a fracture, eſpecially if he be young, of a full habit, or has at the ſame time received any bruiſe

for contuſion. This operation ſhould not only be performed ſoon after the accident happens; but if the patient be very feveriſh, it may be repeated next day. When ſeveral of the ribs are broken, bleeding is peculiarly neceſſary.

If any of the large bones which ſupport the body are broken, the patient muſt keep his bed for ſeveral weeks. It is by no means neceſſary, however, that he ſhould lie all that time, as is cuſtomary, upon his back. This ſituation ſinks the ſpirits, galls and frets the patient's ſkin, and renders him very uneaſy. After the ſecond week he may be gently raiſed up, and may ſit ſeveral hours, ſupported by a bed-chair, or the like, which will greatly relieve him. Great care, however, muſt be taken in raiſing him up and laying him down, that he make no exertions himſelf, otherwiſe the action of the muſcles may pull the bone out of its place.*

It is of great importance to keep the patient dry and clean while in this ſituation. By neglecting this, he is often ſo galled and excoriated, that he is forced to keep ſhifting places for eaſe. I have known a fractured thigh-bone, after it had been kept ſtraight for above a fortnight, diſplaced by this means, and continue bent for life, in ſpite of all that could be done.

It has been cuſtomary when a bone was broken, to keep the limb for five or ſix weeks continually upon the ſtretch. But this is a bad poſture. It is both uneaſy to the patient, and unfavourable to the cure. The beſt ſituation is to keep the limb a little bent. This is the poſture into which every animal puts its limbs when it

* Various pieces of machinery have been contrived for counteracting the force of the muscles, and retaining the fragments of broken bones; but as descriptions of these without drawings would be of little use, I shall refer the reader to a cheap and useful performance, *On the Nature and Cure of Fractures*, lately published by my ingenious friend Mr. Aitkin, surgeon, in Edinburgh; wherein that gentleman has not only given an account of the machines recommended in fractures by former authors, but has likewise added many improvements of his own, which are peculiarly useful in compound fractures, and in cases where patients with broken bones are obliged to be transported from one place to another.

goes to reſt, and in which feweſt muſcles are upon the ſtretch. It is eaſily effected, by either laying the patient upon his ſide, or making the bed ſo as to favour this poſition of the limb.

Bone-ſetters ought carefully to examine whether the bone be not ſhattered or broken into ſeveral pieces. In this caſe it will ſometimes be neceſſary to have the limb immediately taken off, otherwiſe a gangrene or mortification may enſue. The horror which attends the very idea of an amputation, often occaſions its being delayed in ſuch caſes till too late. I have known this principle operate ſo ſtrongly, that a limb, where the bones were ſhattered into more than twenty pieces, was not amputated before the third day after the accident, when the gangrene had proceeded ſo far as to render the operation uſeleſs.

When a fracture is accompanied with a wound, it muſt be dreſſed in all reſpects as a common wound.

All that art can do towards the cure of a broken bone, is to lay it perfectly ſtraight, and to keep it quite eaſy. All tight bandages do hurt. They had much better be wanting altogether. A great many of the bad conſequences which ſucceed to fractured bones, are owing to tight bandages. This is one of the ways in which the exceſs of art, or rather the abuſe of it, does more miſchief than would be occaſioned by the want of it. Some of the moſt ſudden cures of broken bones which were ever known, happened where no bandages were applied at all. Some method, however, muſt be taken to keep the member ſteady; but this may be done many ways, without bracing it with a tight bandage.

The beſt method of retention is by two or more ſplints made of leather or paſteboard. Theſe, if moiſtened before they are applied, ſoon aſſume the ſhape of the included member, and are ſufficient, by the aſſiſtance of a very ſlight bandage, for all the purpoſes of retention. The bandage which we would recommend is that made of twelve or eighteen tails. It is much eaſier applied and taken off than rollers, and anſwers

all the purpoſes of retention equally well. The ſplints ſhould always be as long as the limb, with holes cut for the ancles, when the fracture is in the leg.

In fractures of the ribs, where a bandage cannot be properly uſed, an adheſive plaſter may be applied over the part. The patient in this caſe ought to keep himſelf quite eaſy, avoiding every thing that may occaſion ſneezing, laughing, coughing, or the like. He ought to keep his body in a ſtraight poſture, and would take care that his ſtomach be conſtantly diſtended, by taking frequently ſome light food, and drinking freely of weak watery liquors.

The moſt proper external applications for a fracture is oxycrate, or a mixture of vinegar and water. The bandages ſhould be wet with this at every dreſſing.

OF STRAINS.

Strains are often attended with worſe conſequences than broken bones. The reaſon is obvious; they are generally neglected. When a bone is broken, the patient is obliged to keep the member eaſy, becauſe he cannot make uſe of it; but when a joint is only ſtrained, the perſon, finding he can ſtill make a ſhift to move it, is ſorry to loſe his time for ſo trifling an ailment. In this way he deceives himſelf, and converts into an incurable malady what might have been removed by only keeping the part eaſy for a few days.

Country people generally immerſe a ſtrained limb in cold water. This is very proper, provided it be done immediately, and not kept in too long. But the cuſtom of keeping the part immerſed in cold water for a long time is certainly dangerous: It relaxes inſtead of bracing the part, and is more likely to produce a diſeaſe than remove one.

Wrapping a garter, or ſome other bandage, pretty tight about the ſtrained part, is likewiſe of uſe. It helps to reſtore the proper tone of the veſſels, and prevents the action of the parts from increaſing the diſeaſe. It

ſhould not, however, be applied too tight. I have frequently known bleeding near the affected part have a very good effect: but what we would recommend above all, is eaſe. It is more to be depended on than any medicine, and ſeldom fails to remove the complaint *.

CHAP. LIII.

OF CASUALTIES.

IT is certain that life, when to all appearance loſt, may often, by due care, be reſtored. Accidents frently prove fatal, merely becauſe proper means are not uſed to counteract their effects. No perſon ought to be looked upon as killed by any accident, unleſs where the ſtructure of the heart, brain, or ſome organ neceſſary to life, is evidently deſtroyed. The action of theſe organs may be ſo far impaired, as even to be for ſome time imperceptible, when life is by no means gone. In this caſe, however, if the fluids be ſuffered to grow cold, it will be impoſſible to put them again in motion, even though the ſolids ſhould recover their power of acting. Thus, when the motion of the lungs has been ſtopped by unwholeſome vapour, the action of the heart by a ſtroke on the breaſt, or the functions of the brain by a blow on the head, if the perſon be ſuffered to grow cold, he will in all probability continue ſo; but if the body be kept warm, as ſoon as the injured part has recovered its power of acting, the fluids will again begin to move, and all the vital functions will be reſtored.

It is a horrid cuſtom, immediately to conſign over to

* A great many external applications are recommended for ſtrains, ſome of which do good and others hurt. The following are ſuch as may be uſed with the greateſt ſafety, viz. poultices made of ſtale beer or vinegar and oatmeal, camphorated ſpirits of wine, Mindererus's ſpirit, volatile liniment, volatile aromatic ſpirit diluted with a double quantity of water, and the common fomentation, with the addition of brandy or ſpirit of wine.

death every perſon who has the misfortune, by a fall, a blow, or the like, to be deprived of the appearance of life. The unhappy perſon, inſtead being carried into a warm houſe, and laid by the fire, or put to a warm bed, is generally hurried away to church, or a barn, or ſome other cold damp houſe, where, after a fruitleſs attempt has been made to bleed him, perhaps by one who knew nothing of the matter, he is given over for dead and no farther notice taken of him. This conduct ſeems to be the reſult of ignorance, ſupported by an ancient ſuperſtitious notion, which forbids the body of a perſon killed by accident to be laid in an houſe that is inhabited. What the ground of this ſuperſtition may be, we ſhall not pretend to inquire; but ſurely the conduct founded upon it is contrary to all the principles of reaſon, humanity, and common ſenſe.

When a perſon ſeems to be ſuddenly deprived of life our firſt buſineſs is to inquire into the cauſe. We ought carefully to obſerve whether any ſubſtance be lodged in the windpipe or gullet; and, if that is the caſe, attempts muſt be made to remove it. When unwholeſome air is the cauſe, the patient ought immediately to be removed out of it. If the circulation be ſuddenly ſtopped, from any cauſe whatever, except mere weakneſs, the patient ſhould be bled. If the blood does not flow, he may be immerſed in warm water, or rubbed with warm clothes, &c. to promote the circulation. When the cauſe cannot be ſuddenly removed, our great aim muſt be to keep up the vital warmth, by rubbing the patient, with hot clothe or ſalt, and covering his body with warm ſand aſhes, or the like.

I ſhould now proceed to treat more fully of thoſe accidents, which, without immediate aſſiſtance, would often prove fatal, and to point out the moſt likely means for relieveing the unhappy ſufferers, but as I have been happily anticipated in this part of my ſubject by the learned and humane Dr. Tiſſot, I ſhall content myſelf with ſelecting ſuch of his obſervations as ſeem to be

the moſt important, and adding ſuch of my own as have occured in the courſe of practice.

OF SUBSTANCES STOPT BETWEEN THE MOUTH AND STOMACH.

Though accidents of this kind are very common, and extremely dangerous, yet they are generally the effect of careleſſneſs. Children ſhould be taught to chew their food well, and to put nothing into their mouths which it would be dangerous for them to ſwallow. But children are not the only perſons guilty of this piece of imprudence. I know many adults who put pins, nails, and other ſharp pointed ſubſtances in their mouths upon every occaſion, and ſome who even ſleep with the former there all night. This conduct is exceedingly injudicious, as a fit of coughing, or twenty other accidents, may force them down over the ſubſtance before the perſon is aware *.

When any ſubſtance is detained in the gullet, there are two ways of removing it, viz. either by extracting it, or puſhing it down. The ſafeſt and moſt certain way is to extract it; but this is not always the eaſieſt: it may therefore be more eligible ſometime to thruſt it down, eſpecially when the obſtructing body is of ſuch a nature, that there is no danger from its reception into the ſtomach. The ſubſtances which may be puſhed down without danger, are all common nouriſhing ones, as bread, fleſh, fruits and the like. All indigeſtible bodies, as cork, wood, bones, pieces of metal, and ſuch like, ought, if poſſible, to be extracted, eſpecially if theſe bodies be ſharp pointed, as pins, needles, fiſh bones, bits of glaſs, &c.

When ſuch ſubſtances have not paſſed in too deep, we ſhould endeavour to extract them with our fingers; which method often ſucceeds. When they are lower, we muſt make uſe of nippers, or a ſmall pair of forceps,

* A woman in one of our hoſpitals in this city lately diſcharged a great number of pins, which ſhe had ſwallowed in the courſe of her buſineſs, through an ulcer in her ſide.

ſuch as ſurgeons uſe. But this attempt to extract rarely ſucceeds, if the ſubſtance be of a flexible nature, and has deſcended far into the gullet.

If the fingers and nippers fail, or cannot be duly applied, crotchets, a kind of hooks, muſt be employed. Theſe may be made at once, by bending a piece of pretty ſtrong iron wire at one end. It muſt be introduced in the flat way; and, for the better conducting it, there ſhould likewiſe be a curve or bending at the end it is held by, to ſerve as a kind of handle to it; which has this farther uſe, that it may be ſecured by a ſtring tied to it; a circumſtance not to be omitted in any inſtrument employed on ſuch occaſions, to avoid ſuch ill accidents as have ſometimes enſued from theſe inſtruments ſlipping out of the operator's hand. After the crotchet has paſſed below the ſubſtance that obſtructs the paſſage, it is drawn up again, and hooks up the body along with it. The crotchet is alſo very convenient, when a ſubſtance ſomewhat flexible, as a pin or fiſh bone, ſticks acroſs the gullet, the hook, in ſuch caſes, ſeizing them about their middle part, crooks, and thus diſengages them; or, if they are very briſtle ſubſtances, ſerves to break them.

When the obſtructing bodies are ſmall, and only ſtop up a part of the paſſage, and which may either eaſily elude the hook, or ſtrainten it by their reſiſtance, a kind of rings, made either of wire, wool, or ſilk, may be uſed. A piece of fine wire of a proper length may be bent into a circle, about the middle, of about an inch diameter, and the long unbent ſides brought parallel, and near each other; theſe are to be held in the hand, and the circular part or ring introduced into the gullet, in order to be conducted about the obſtructing body, and ſo to extract it. More flexible rings may be made of wool, thread, ſilk, or ſmall pack thread, which may be waxed for their greater ſtrength and conſiſtence. One of theſe is to be tied faſt to a handle of iron wire, whalebone, or any kind of flexible wood, and by this means introduced, in order to ſurround the obſtructing ſubſtance, and to draw it out. Several of theſe rings

paſſed through one another, may be uſed, the more certainly to lay hold of the obſtructing body, which may be involved by one, if another ſhould miſs it. Theſe rings have one advantage, which is, that when the ſubſtance to be extracted is once laid hold of, it may then, by turning the handle, be retained ſo ſtrongly in the ring thus twiſted, as to be moved every way, which muſt in many caſes be a conſiderable advantage.

Another material employed on theſe unhappy occaſions is the ſponge. Its property of ſwelling conſiderably on being wet is the principal foundation of its uſefulneſs here. If any ſubſtance is ſtopped in the gullet, but without filling up the whole paſſage, a bit of ſponge may be introduced into that part which is unſtopped, and beyond the ſubſtance. The ſponge ſoon dilates, and grows larger in this moiſt ſituation; and indeed the enlargement of it may be forwarded by making the patient ſwallow a few drops of water. Afterward it is to be drawn back by the handle to which it is faſtened; and as it is now too large to return through the ſmall cavity by which it was conveyed in, it draws out the obſtructing body along with it.

The compreſſibility of ſponge is another foundation of its uſefulneſs in ſuch caſes. A pretty large piece of ſponge may be compreſſed or ſqueezed into a ſmall ſize, by winding a ſtring of tape cloſely about it, which may be eaſily unwound and withdrawn, after the ſponge has been introduced. A bit of ſponge may likewiſe be compreſſed by a piece of whalebone ſplit at one end; but this can hardly be intorduced in ſuch a manner as not to hurt the patient.

I have often known pins and other ſharp bodies, which had ſtuck in the throat, brought up by cauſing the perſon to ſwallow a bit of tough meat tied to a thread, and drawing it quickly up again. This is ſafer than ſwallowing ſponge, and will often anſwer the purpoſe equally well.

When all theſe methods prove unſucceſsful, there remains one more, which is, to make the patient vomit; but this can ſcarcely be of any ſervice, unleſs when

ſuch obſtructing bodies are ſimply engaged in, and not hooked or ſtuck into the ſides of the gullet, as in this caſe vomiting might ſometimes occaſion farther miſchief. If the patient can ſwallow, vomiting may be excited by taking half a drachm or two ſcruples of ipecacuanha in powder made into a draught. If he is not able to ſwallow, an attempt may be made to excite vomiting, by tickling his throat with a feather: and if that ſhould not ſucceed, a clyſter of tobacco may be adminiſtered. It is made by boiling an ounce of tobacco in a ſufficient quantity of water. This has often been found to ſucceed, when other attempts to excite vomiting had failed.

When the obſtructing body is of ſuch a nature that it may with ſafety be puſhed downwards, this may be attempted by means of a wax candle oiled, and a little heated, ſo as to make it flexible; or a piece of whalebone, wire, or flexible wood, with a ſponge faſtened to one end.

Should it be impoſſible to extract even thoſe bodies which it is dangerous to admit into the ſtomach, we muſt then prefer the leaſt of two evils, and rather run the hazard of puſhing them down, than ſuffer the patient to periſh in a few minutes; and we ought to ſcruple this reſolution the leſs, as a great many inſtances have happened, where the ſwallowing of ſuch hurtful and indigeſtible ſubſtances has been followed by no diſorder.

Whenever it is manifeſt that all endeavours either to extract or puſh down the ſubſtance muſt prove ineffectual, they ſhould be diſcontinued; becauſe the inflammation occaſioned by perſiſting in them, might be as dangerous as the obſtruction itſelf. Some have died in conſequence of the inflammation, even after the body which cauſed the obſtruction had been entirely removed.

While the means recommended above are making uſe of, the patient ſhould often ſwallow, or, if he cannot, he ſhould frequently receive by injection, through a crooked tube or pipe that may reach down to the gullet, ſome emollient liquor, as warm milk and water, barley water, or a decoction of mallows. Injections of

this kind not only ſoften and ſooth the irritated parts, but, when thrown in with force, are often more ſucceſsful in looſening the obſtruction than all attempts with inſtruments.

When, after all our endeavours, we are obliged to leave the obſtructing body in the part, the patient muſt be treated as if he had an inflammatory diſeaſe. He ſhould be bled, kept upon a low diet and have his whole neck ſurrounded with emmollient poultices. The like treatment muſt alſo be uſed, if there be any reaſon to ſuſpect an inflammation of the paſſages, though the obſtructing body be removed.

A proper degree of agitation has ſometimes looſened the inhering body more effectually than inſtruments. Thus a blow on the back has often forced up a ſubſtance which ſtuck in the gullet; but this is ſtill more proper and efficacious when the ſubſtance gets into the windpipe. In this caſe vomiting and ſneezing are likewiſe to be excited. Pins, which ſtuck in the gullet, have been frequently diſcharged by riding on horſeback, or in a carriage.

When any indigeſtible ſubſtance has been forced down into the ſtomach, the patient ſhould uſe a very mild and ſmooth diet, conſiſting chiefly of fruits and farinaceous ſubſtances, as puddings, pottage and ſoups. He ſhould avoid all heating and irritating things, as wine, punch, pepper, and ſuch like; and his drink ſhould be milk and water, barley-water, or whey.

When the gullet is ſo ſtrongly and fully cloſed, that the patient can receive no food by the mouth, he muſt be nouriſhed by clyſters of ſoup, jelly, and the like.

When the patient is in danger of being immediately ſuffocated, and all hope of freeing the paſſage is vaniſhed, ſo that death ſeems at hand, if reſpiration be not reſtored, the operation of bronchotomy, or opening of the wind pipe, muſt be directly performed. As this operation is neither difficult to an expert ſurgeon, nor very painful to the patient, it is often the only method which can be taken to preſerve life in theſe emergen-

cies. We thought proper to mention it, though it ſhould only be attempted by perſons ſkilled in ſurgery.

OF NOXIOUS VAPOURS.

Air may be many ways rendered noxious, or even deſtructive to animals. This may either happen from its vivifying principle being deſtroyed, or from ſubtle exhalations with which it is impregnated. Thus air that has paſſed through burning fuel is neither capable of ſupporting fire nor the life of animals. Hence the danger of ſleeping in cloſe chambers, with charcoal fires. Some indeed ſuppoſe the danger proceeds from the ſulphureous oil contained in the charcoal, which is ſet at liberty and diffuſed all over the chamber; while others imagine it is owing to the air of the room being charged with phlogiſton. Be this as it may, it is a ſituation carefully to be avoided. Indeed, it is dangerous to ſleep in a ſmall apartment with a fire of any kind. I lately ſaw four perſons who had been ſuffocated by ſleeping in an apartment where a ſmall fire of coal had been left burning.

The vapour which exhales from wine, cyder, beer or other liquors in the ſtate of fermention, contains ſomething poiſonous, which kills in the ſame manner as the vapour of coal. Hence there is always danger in going into cellars where a large quantity of theſe liquors is in a ſtate of fermentation, eſpecially if they have been cloſe ſhut up for ſome time. There have been many inſtances of perſons ſtruck dead on entering ſuch places, and of others who have with difficulty eſcaped.

When ſubterraneous caves, that have been very long ſhut, are opened, or when deep wells are cleaned, which have not been emptied for ſeveral years, the vapours ariſing from them produce the ſame effects as thoſe mentioned above. For this reaſon, no perſon ought to venture into a well, pit, cellar, or any place that is damp, and has been long ſhut up, till the air has been ſuffi-

iently purified, by burning gunpowder in it. It is asy to know, as has been obſerved in a former part of his work, when the air of ſuch places is unwholeſome, by letting down a lighted candle, throwing in burning fuel, or the like. If theſe continue to burn, people may ſafely venture in; but where they are ſuddenly extinguiſhed, no one ought to enter till the air has been firſt purified by fire.

The offenſive ſtink of lamps and of candles, eſpecially when their flames are extinguiſhed, operate like other vapours, though with leſs violence, and leſs ſuddenly. There have, however, been inſtances of people killed by the fumes of lamps which had been extinguiſhed in a cloſe chamber; and perſons of weak, delicate breaſts, generally find themſelves quickly oppreſſed in apartments illuminated with many candles.

Such as are ſenſible of their danger in theſe ſituations, and retreat ſeaſonably from it, are generally relieved as ſoon as they get into the open air, or, if they have any remaining uneaſineſs, a little water and vinegar, or lemonade, drank hot, affords them relief. But when they are ſo far poiſoned, as to have loſt their feeling and underſtanding, the following means muſt be uſed for their recovery:

The patient ſhould be expoſed to very pure, freſh, and open air; and volatile ſalts, or other ſtimulating ſubſtances, held to the noſe. He ſhould next be bled in the arm, or, if that does not ſucceed, in the neck. His legs ought to be put into warm water, and well rubbed. As ſoon as he can ſwallow, ſome lemonade, or water and vinegar, with the addition of a little nitre, may be given him.

Nor are ſharp clyſters by any means to be neglected; theſe may be made, by adding to the common clyſter, ſyrup of buckthorn and tincture of ſenna, of each two ounces; or in their ſtead half an ounce of Venice turpentine diſſolved in the yolk of an egg. Should theſe things not be at hand, two or three large ſpoonfuls of common ſalt may be put into the clyſter. The ſame means, if neceſſary, which were recommended in the

former part of this chapter, may be uſed to reſtore the circulation, warmth, &c.

Mr. Toſſach, ſurgeon at Alloa, relates the caſe of a man ſuffocated by the ſteam of burning coal, whom he recovered by blowing his breath into the patient's mouth, bleeding him in the arm, and cauſing him to be well rubbed and toſſed about. And Dr. Frewen, of Suſſex, mentions the caſe of a young man who was ſtupified by the ſmoke of ſea coal, but was recovered by being plunged into cold water, and afterwards laid in a warm bed.

The practice of plunging perſons ſuffocated by noxious vapours in cold water, would ſeem to be ſupported by the common experiment of ſuffocating dogs in the *grotto del cani*, and afterwards recovering them, by throwing them into the neighbouring lake.

EFFECTS OF EXTREME COLD.

When cold is extremely ſevere, and a perſon is expoſed to it for a long time, it proves mortal, in conſequence of its ſtopping the circulation in the extremities, and forcing too great a proportion of blood towards the brain; ſo that the patient dies of a kind of apoplexy, produced by great ſleepineſs. The traveller, in this ſituation, who finds himſelf begin to grow drowſy, ſhould redouble his efforts to extricate himſelf from the imminent danger he is expoſed to. This ſleep, which he might conſider as ſome alleviation of his ſufferings, would, if indulged, prove his laſt.

Such violent effects of cold are happily not very common in this country; it frequently happens, however, that the hands or feet of travellers are ſo benumbed or frozen, as to be in danger of a mortification, if proper means are not uſed to prevent it. The chief danger in this ſituation ariſes from the ſudden application of heat. It is very common, when the hands or feet are pinched with cold, to hold them to the fire; yet reaſon and obſervation ſhew that this is a moſt dangerous and imprudent practice.

Every peaſant knows, if frozen meat, fruits, or roots of any kind, be brought near the fire, or put into warm water, they will be deſtroyed by rottenneſs, or a kind of mortification; and that the only way to recover them, is to immerſe them for ſome time in very cold water. The ſame obſervation holds with regard to animals in this condition.

When the hands or feet are greatly benumbed with cold, they ought either to be immerſed in cold water, or rubbed with ſnow, till they recover their natural warmth and ſenſibility: after which, the perſon may be removed into an apartment a little warmer, and may drink ſome cups of tea, or an infuſion of elder flowers ſweetened with honey. Every perſon muſt have obſerved, when the hands were even but slightly affected with cold, that the beſt way to warm them was by waſhing them in cold water, and continuing to rub them well for ſome time.

When a perſon has been long ſo expoſed to the cold, that all appearances of life are gone, it will be neceſſary to rub him all over with ſnow or cold water; or what will anſwer better, if it can be obtained, to immerſe him in a bath of the very coldeſt water. There is the greateſt encouragement to perſiſt in the uſe of theſe means, as we are aſſured that perſons who had remained in the ſnow, or had been expoſed to the freezing air during five or ſix ſucceſſive days, and who had diſcovered no marks of life for ſeveral hours, have nevertheleſs been revived.

I have always thought that the whitloes, kibes, chilblains, and other inflammations of the extremities, which are ſo common among the peaſants in the cold ſeaſon, were chiefly occaſioned by their ſudden tranſitions from cold to heat. After they have been expoſed to an extreme degree of cold they immediately apply their hands and feet to the fire, or, if the have occaſion, plunge them into warm water, by which means, if a mortification does not happen, an inflammation ſeldom fails to enſue. Moſt of the ill conſequences

from this quarter, might be eaſily avoided, by only obſerving the precautions mentioned above

EFFECTS OF EXTREME HEAT.

The effects of extreme heat, though not ſo common, in this country, are no leſs fatal, and much more ſudden than thoſe of cold. In hot countries people frequently drop down dead in the ſtreets, exhauſted with heat and fatigue. In this caſe if any warm cordial can be poured into the mouth, it ought to be done. If this cannot be effected, they may be thrown up in form of a clyſter. Volatile ſpirits, and other things of a ſtimulating nature, may be applied to the ſkin, which ſhould be well rubbed with coarſe cloths, whipped with nettles, or other ſtimulating things. Some of the ancient phyſicians are ſaid to have reſtored to life perſons apparently dead, by beating them with rods.

Head aches that proceed from too great expoſure to the ſun in hot climates, may be cured by applying linen cloths, ſoaked in cold water, to the head.

CHAP. LIV.

OF FAINTING FITS, AND OTHER CASES WHICH REQUIRE IMMEDIATE ASSISTANCE.

STRONG and healthy perſons, who abound with blood, are often ſeized with ſudden fainting fits, after violent exerciſe, drinking freely of warm or ſtrong liquors, expoſure to great heat, intenſe application to ſtudy, or the like.

In ſuch caſes the patient ſhould be made to ſmell to ſome vinegar. His temples, forehead and wriſts, ought at the ſame time to be bathed with vinegar mixed with an equal quantity of warm water; and two or three ſpoonfuls of vinegar, with four or five times as

much water, may, if he can ſwallow, be poured into his mouth.

If the fainting proves obſtinate or degenerates into a ſyncope, that is an abolition of feeling and underſtanding, the patient muſt be bled. After the bleeding, a clyſter will be proper, and then he ſhould be kept eaſy and quiet, only giving him every half hour a cup or two of an infuſion of any mild vegetable, with the addition of a little ſugar and vinegar.

When ſwoonings, which ariſe from this cauſe, occur frequently in the ſame perſon, he ſhould, in order to eſcape them, confine himſelf to a light diet, conſiſting chiefly of bread, fruits, and other vegetables. His drink ought to be water or ſmall beer, and he ſhould ſleep but moderately, and take much exerciſe.

But fainting fits proceed much oftener from a defect than an exceſs of blood. Hence they are very ready to happen after great evacuations of any kind, obſtinate watching, want of appetite, or ſuch like. In theſe, an almoſt directly oppoſite courſe to that mentioned above muſt be purſued,

The patient ſhould be laid in bed, with his head low, and being covered, ſhould have his legs, thighs, arms, and his whole body rubbed ſtrongly with hot flannels. Hungary water, volatile ſalts, or ſtrong ſmelling herbs, as rue, mint, or roſemary, may be held to his noſe. His mouth may be wet with a little rum or brandy; and if he can ſwallow, ſome hot wine, mixed with ſugar and cinnamon, which is an excellent cordial, may be poured into his mouth. A compreſs of flannel dipt in hot wine or brandy muſt be applied to the pit of his ſtomach, and warm bricks, or bottles filled with hot water, laid to his feet.

As ſoon as the patient is recovered a little, he ſhould take ſome ſtrong ſoup or broth, or a little bread or biſcuit, ſoaked in hot ſpiced wine. To prevent the return of the fits, he ought to take often, but in ſmall quantities, ſome light yet ſtrengthening nouriſhment, as panado made with ſoup inſtead of water, new laid

eggs lightly poached, chocolate, light roaſt meats, jellies, and ſuch like.

Thoſe fainting fits, which are the effect of bleeding or of the violent operations of purges, belong to this claſs. Such as happen after artificial bleeding are ſeldom dangerous, generally terminating as ſoon as the patient is laid upon the bed; indeed, perſons ſubject to this kind ſhould always be bled lying, in order to prevent it. Should the fainting, however, continue longer than uſual, volatile ſpirits may be held to the noſe, and rubbed on the temples, &c.

When fainting is the effect of too ſtrong or acrid purges or vomits, the patient muſt be treated in all reſpects as if he had taken poiſon. He ſhould be made to drink plentifully of milk, warm water, and oil, barley water, or ſuch like; emollient clyſters will likewiſe be proper, and the patient's ſtrength ſhould afterwards be recruited, by giving him generous cordials, and anodyne medicines.

Faintings are often occaſioned by indigeſtion. This may either proceed from the quantity or quality of the food. When the former of theſe is the cauſe, the cure will be beſt performed by vomiting, which may be promoted by cauſing the patient to drink a weak infuſion of camomile flowers, carduus benedictus, or the like. When the diſorder proceeds from the nature of the food, the patient, as in the caſe of weakneſs, muſt be revived by ſtrong ſmells, &c.; after which he ſhould be made to ſwallow a large quantity of light warm fluid, which may ſerve to drown, as it were the offending matter, to ſoften its acrimony, and either to effect a diſcharge of it by vomiting, or force it down into the inteſtines.

Even diſagreeable ſmells will ſometimes occaſion ſwoonings, eſpecially in people of weak nerves. When this happens, the patient ſhould be carried into the open air, have ſtimulating things held to his noſe, and thoſe ſubſtances which are diſagreeable to him ought immediately to be removed. But we have already

taken notice of ſwoonings which ariſe from nervous diſorders, and ſhall therefore ſay no more upon that head.

Fainting fits often happen in the progreſs of diſeaſes. In the beginning of putrid diſeaſes, they generally denote an oppreſſion at the ſtomach, or a maſs of corrupted humours, and they ceaſe after evacuations either by vomit or ſtool. When they occur at the beginning of malignant fevers they indicate great danger. In each of theſe caſes, vinegar uſed both externally and internally is the beſt remedy during the paroxyſm, and plenty of lemon juice and water of it. Swoonings which happen in diſeaſes accompanied with great evacuations, muſt be treated like thoſe which are owing to weakneſs, and the evacuations ought to be reſtrained. When they happen towards the end of a violent fit of an intermitting fever, or at that of each exacerbation of a continual fever, the patient muſt be ſupported by ſmall draughts of wine and water.

Delicate and hyſteric women are very liable to ſwooning or fainting fits after delivery. Theſe might be often prevented by generous cordials, and the admiſſion of freſh air. When they are occaſioned by exceſſive flooding, it ought by all means to be reſtrained. They are generally the effect of mere weakneſs or exhauſtion. Dr. Engleman relates the caſe of a woman "in childbed, who after being happily delivered, ſuddenly fainted, and lay upwards of a quarter of an hour apparently dead. A phyſician was ſent for; her own maid, in the mean time, being out of patience at this delay, attempted to aſſiſt her herſelf, and extending herſelf upon her miſtreſs, applied her mouth to her's, blew in as much breath as ſhe poſſibly could, and in a very ſhort time the exhauſted woman awaked as out of a profound ſleep, when proper things being given her, ſhe ſoon recovered.

"The maid being asked how ſhe came to think of this expedient, ſaid ſhe had ſeen it practiſed at Alten-

burgh, by midwives, upon children, with the happieſt effect."

We mention this caſe chiefly, that other midwives may be induced to follow ſo laudable an example. Many children are born without any ſigns of life, and others expire ſoon after the birth, who might, without all doubt, by proper care be reſtored to life.

From whatever cauſe fainting fits proceed, freſh air is always of the greateſt importance to the patient. By not attending to this circumſtance, people often kill their friends while they are endeavouring to ſave them. Alarmed at the patient's ſituation, they call in a crowd of people to his aſſiſtance, or perhaps to witneſs his exit, whoſe breathing exhauſts the air, and increaſes the danger. There is not the leaſt doubt but this practice, which is very common among the lower ſort of people, often proves fatal, eſpecially to the delicate, and ſuch perſons as fall into fainting fits from mere exhauſtion, or the violence of ſome diſeaſe. No more perſons ought ever to be admitted into the room where the patient lies in a ſwoon, that are abſolutely neceſſary for his aſſiſtance, and the windows of the apartment ſhould always be opened, at leaſt as far as to admit a ſtream of freſh air.

Perſons ſubject to frequent ſwoonings or fainting fits, ſhould neglect no means to remove the cauſe of them, as the conſequences are always injurious to the conſtitution. Every fainting fit leaves the perſon in dejection and weakneſs; the ſecretions are thereby ſuſpended, the humours diſpoſed to ſtagnation, coagulations and obſtructions are formed, and, if the motion of the blood be totally intercepted, or very conſiderably checked, polypuſes are ſometimes formed in the heart or larger veſſels. The only kind of ſwoonings not to be dreaded, are thoſe which ſometimes mark the criſis in fevers; yet even theſe ought, as ſoon as poſſible, to be removed.

OF INTOXICATION.

The effects of intoxication are often fatal. No kind of poiſon kills more certainly than an overdoſe of ardent ſpirits. Sometimes, by deſtroying the nervous energy, they put an end to life at once; but in general their effects are more ſlow, and in many reſpects ſimilar to thoſe of opium. Other kinds of intoxicating liquors may prove fatal when taken to exceſs, as well as ardent ſpirits; but they may generally be diſcharged by vomiting, which ought always to be excited when the ſtomach is overcharged with liquor.

More of thoſe unhappy perſons, who die intoxicated, loſe their lives from an inability to conduct themſelves, than from the deſtructive quality of the liquor. Unable to walk, they tumble down, and lie in ſome aukward poſture, which obſtructs the circulation or breathing, and often continue in this ſituation till they die. No drunken perſon ſhould be left by himſelf till his clothes have been looſened, and his body laid in ſuch a poſture as is moſt favourable for continuing the vital motions, diſcharging the contents of the ſtomach, &c. The beſt poſture for diſcharging the contents of the ſtomach is to lay the perſon upon his belly; when aſleep he may be laid on his ſide with his head a little raiſed, and particular care muſt be taken that his neck be no ways bent, twiſted, or have any thing too tight about it.

The exceſſive degree of thirſt occaſioned by drinking ſtrong liquors, often induces people to quench it by taking what is hurtful. I have known fatal conſequences even from drinking freely of milk after a debauch of wine or ſour punch; theſe acid liquors, together with the heat of the ſtomach, having coagulated the milk in ſuch a manner that it could never be digeſted. The ſafeſt drink after a debauch is water with a toaſt, tea, infuſions of balm, ſage, barley water, and

ſuch like. If the perſon wants to vomit, he may drink a weak infuſion of camomile flowers, or lukewarm water and oil, but in this condition vomiting may generally be excited by only tickling the throat with the finger or a feather.

Inſtead of giving a detail of all the different ſymptoms of intoxication which indicate danger, and propoſing a general plan of treatment for perſons in this ſituation, I ſhall briefly relate the hiſtory of a caſe which lately fell under my own obſervation, wherein moſt of thoſe ſymptoms uſually reckoned dangerous concurred, and where the treatment was ſucceſsful.

A young man about fifteen years of age, had for a hire drank ten glaſſes of ſtrong brandy. He ſoon after fell faſt aſleep, and continued in that ſituation for ſeveral hours, till at length his uneaſy manner of breathing, the coldneſs of the extremities, and other threatening ſymptoms, alarmed his friends, and made them ſend for me. I found him ſtill ſleeping, his countenance ghaſtly, and his ſkin covered with a cold clammy ſweat. Almoſt the only ſigns of life remaining were, a deep laborious breathing, and a convulſive motion or agitation of his bowels.

I tried to rouſe him, but in vain, by pinching, ſhaking, applying volatile ſpirits, and other ſtimulating things to his noſe, &c. A few ounces of blood were likewiſe taken from his arm, and a mixture of vinegar and water was poured into his mouth, but as he could not ſwallow, very little of this got into the ſtomach. None of theſe things having the leaſt effect, and the danger ſeeming to increaſe, I ordered his legs to be put into warm water, and a ſharp clyſter to be immediately adminiſtered. This gave him a ſtool, and was the firſt thing that relieved him. It was afterwards repeated with the ſame happy effect, and ſeemed to be the chief cauſe of his recovery. He then began to ſhew ſome ſigns of life, took drink when it was offered him, and came gradually to his ſenſes; he continued, however, for ſeveral days weak and feveriſh, and complained

much of a ſoreneſs in his bowels, which gradually went off, by means of a ſlender diet, and cool mucilaginous liquors.

This young man would probably have been ſuffered to die, without any aſſiſtance being called, had not a neighbour, a few days before, who had been adviſed to drink a bottle of ſpirits to cure him of an ague, expired under very ſimilar circumſtances.

OF SUFFOCATION AND STRANGLING.

Theſe may ſometimes proceed from an infraction of the lungs, produced by viſcid clammy humours, or a ſpaſmodic affection of the nerves of that organ. Perſons who feed groſsly, and abound in rich blood, are very liable to ſuffocating fits from the former of theſe cauſes. Such ought, as ſoon as they are attacked, to be bled, to receive an emollient clyſter, and to take frequently a cup of diluting liquor with a little nitre in it. They ſhould likewiſe receive the ſteams of hot vinegar into their lungs by breathing.

Nervous and aſthmatic perſons are moſt ſubject to ſpaſmodic affections of the lungs. In this caſe the patient's legs ſhould be immerſed in warm water, and the ſteams of vinegar applied as above. Warm diluting liquors ſhould likewiſe be drank; to a cup of which a tea-ſpoonful of the paragoric elixir may occaſionally be added. Burnt paper, feathers, or leather, may be held to the patient's noſe, and freſh air ſhould be freely admitted to him.

Infants are often ſuffocated by the careleſsneſs or inattention of their nurſes*. An infant when in bed ſhould always be laid ſo, that it cannot tumble down with its head under the bed clothes; and when in a cra-

* These accidents are not always the effects of carelessness. I have known an infant overlaid by its mother being seised in the night with an hysteric fit. This ought to serve as a caution against employing hysteric women as nurses; and should likewise teach such women never to lay an infant in the same bed with themselves, but in a small adjacent one.

dle, its face ought never to be covered. A ſmall degree of attention to theſe two ſimple rules would ſave the lives of many infants, and prevent others from being rendered weak and ſickly all their days by the injuries done to their lungs.

Inſtead of laying down a plan for the recovery of infants who are ſuffocated, or overlaid, as it is termed by their nurſes, I ſhall give the hiſtory of a caſe related by Monſieur Janin, of the Royal College of Surgery at Paris, as it was attended with ſucceſs, and contains almoſt every thing that can be done on ſuch occaſions.

A nurſe having had the misfortune to overlay a child, he was called in, and found the infant without any ſigns of life; no pulſation in the arteries, no reſpiration, the face livid, the eyes open, dull, and tarniſhed, the noſe full of ſnivel, the mouth gaping, in ſhort it was almoſt cold. Whilſt ſome linen cloths and a parcel of aſhes were warming, he had the boy unſwathed, and laid him in a warm bed, and on the right ſide. He then was rubbed all over with fine linen, for fear of fretting his tender and delicate ſkin. As ſoon as the aſhes had received their due degree of heat, Mr. Janin buried him in them, except the face, placed him on the ſide oppoſite to that on which he had been at firſt laid, and covered him with a blanket. He had a bottle of eau de luce in his pocket, which he preſented to his noſe from time to time; and between whiles ſome puffs of tobacco were blown up his noſtrils; to theſe ſucceeded the blowing into his mouth, and ſqueezing tight his noſe. Animal heat began thus to be excited gradually; the pulſations of the temporal artery were ſoon felt, the breathing became more frequent and free, and the eyes cloſed and opened alternately. At length the child fetched ſome cries expreſſive of his want of the breaſt, which being applied to the mouth, he catched at it with avidity, and ſucked as if nothing had happened to him. Though the pulſations of the arteries were by this time very well re-eſtabliſhed, and it was hot weather, yet Mr. Janin thought it adviſeable to leave

his patient three quarters of an hour longer under the aſhes. He was afterwards taken out, cleaned and dreſſed as uſual; to which a gentle ſleep ſucceeded, and he continued perfectly well.

Mr. Janin mentions likewiſe an example of a young man who had hanged himſelf through deſpair, to whom he adminiſtered help as effectually as in the preceding caſe.

Mr. Glover, ſurgeon, in Doctors' Commons, London, relates the caſe of a perſon who was reſtored to life after twenty-nine minutes hanging, and continued in good health for many years after.

The principal means uſed to reſtore this man to life were, opening the temporal artery and the external jugular; rubbing the back, mouth, and neck, with a quantity of volatile ſpirits and oil; adminiſtering the tobacco clyſter by means of lighted pipes, and ſtrong frictions of the legs and arms. This courſe had been continued for about four hours, when an inciſion was made into the wind-pipe, and air blown ſtrongly through a canula into the lungs. About twenty minutes after this, the blood at the artery, began to run down the face, and a ſlow pulſe was juſt perceptible at the wriſt. The frictions were continued for ſome time longer; his pulſe became more frequent, and his mouth and noſe being irritated with ſpirit of ſal amoniac, he opened his eyes. Warm cordials were then adminiſtered to him, and in two days he was ſo well as to be able to walk eight miles.

Theſe caſes are ſufficient to ſhew what may be done for the recovery of thoſe unhappy perſons who ſtrangle themſelves in a fit of deſpair.

OF PERSONS WHO EXPIRE IN CONVULSION FITS.

Convulſion fits often conſtitute the laſt ſcene of acute or chronic diſorders. When this is the caſe, there can remain but ſmall hopes of the patient's recovery after expiring in a fit. But when a perſon who appears to be

in perfect health, is ſuddenly ſeized with a convulſion fit, and ſeems to expire, ſome attempts ought always to be made to reſtore him to life. Infants are moſt liable to convulſions, and are often carried off very ſuddenly by one or more fits about the time of teething. There are many well authenticated accounts of infants having been reſtored to life, after they had to all appearance expired in convulſions; but we ſhall only relate the following inſtance mentioned by Dr. Johnſon in his pamphlet *on the practicability of recovering perſons viſibly dead.*

In the pariſh of St. *Clement's*, *Colchester*, a child of ſix months old, lying upon its mother's lap, having had the breaſt, was ſeized with a ſtrong convulſion fit, which laſted ſo long, and ended with ſo total a privation of motion in the body, lungs, and pulſe, that it was deemed abſolutely dead. It was accordingly ſtripped, laid out, the paſſing-bell ordered to be tolled, and a coffin to be made; but a neighbouring gentlewoman who uſed to admire the child, hearing of its ſudden death, haſtened to the houſe, and upon examining the child, found it not cold, its joints limber, and fancied that a glaſs ſhe held to its mouth and noſe was a little damped with the breath; upon which ſhe took the child in her lap, ſat down before the fire, rubbed it, and kept it in gentle agitation. In a quarter of an hour ſhe felt the heart begin to beat faintly; ſhe then put a little of the mother's milk into its mouth, continued to rub its palms and ſoles, found the child begin to move, and the milk was ſwallowed; and in another quarter of an hour ſhe had the ſatisfaction of reſtoring to its diſconſolate mother the babe quite recovered, eager to lay hold of the breaſt, and able to ſuck again. The child throve, had no more fits, is grown up, and at preſent alive.

Theſe means, which are certainly in the power of every perſon, were ſufficient to reſtore to life an infant to all appearance dead, and who, in all probability, but for the uſe of theſe ſimple endeavours, would have remained ſo. There are, however, many other things

which might be done in caſe the above ſhould not ſucceed; as rubbing the body with ſtrong ſpirits, covering it with warm aſhes or ſalt, blowing air into the lungs, throwing up warm ſtimulating clyſters, or the ſmoke of tobacco, into the inteſtines, and ſuch like.

When children are dead born, or expire ſoon after the birth, the ſame means ought to be uſed for their recovery, as if they had expired in circumſtances ſimilar to thoſe mentioned above.

Theſe directions may likewiſe be extended to adults, attention being always paid to the age and other circumſtances of the patient.

The foregoing caſes and obſervations afford ſufficient proof of the ſucceeſs which may attend the endeavours of perſons totally ignorant of medicine, in aſſiſting thoſe who are ſuddenly deprived of life by any accident or diſeaſe. Many facts of a ſimiliar nature might be adduced, were it neceſſary; but theſe, it is hoped, will be ſufficient to call up the attention of the public, and to excite the humane and benevolent to exert their utmoſt endeavours for the preſervation of their fellow men.

The ſucceſs of the Humane Society for the recovery of drowned perſons, has been equal to its philanthropic purpoſe; and a great proportion of theſe have been reſtored without medical aid. In other caſes of ſuſpended animation, ſimilar means might be uſed with ſucceſs, eſpecially in ſudden apparent deaths in fits, where the perſon without any viſible cauſe falls down and expires; or when proceeding from caſualties, ſuffocation from the ſulphureous damps of coal pits, mines, and the air of ſhut up caverns, or other noxious vapours; laſtly, in apparent deaths from cold, hunger, ſtrangling, &c.; in all theſe caſes remedies ſhould always be attempted and perſevered in, till actual death be completely aſcertained.

Every perſon ſhould be acquainted with ſuch remedies, as theſe are not caſes to wait for medical aid, nor do they require medical ſkill. The principal thing is to reſtore warmth and the vital motions, by blowing

air into the lungs, friction, bleeding and adminiſtering clyſters and cordials, according to circumſtances. The premium offered for the reward of recovering drowned or apparently dead perſons, is highly proper: but the innate ſatisfaction of reſtoring a fellow creature to life, will itſelf be a complete reward to every benevolent mind.

CHAP. LV.

OF COLD-BATHING, WITH REMARKS ON THE CASES IN WHICH THE WARM BATH IS MORE ADVISABLE.

IMMERSION in cold water is a cuſtom which lays claim to the moſt remote antiquity. Indeed it muſt have been coeval with man himſelf. The neceſſity of water for the purpoſe of cleanlineſs, and the pleaſure ariſing from its application to the body in hot countries, muſt very early have recommended it to the human ſpecies. Even the example of other animals was ſufficient to give the hint to man. By inſtinct, many of them are led to apply cold water in this manner; and ſome, when deprived of its uſe, have been known to languiſh, and even to die. But whether the practice of cold bathing aroſe from neceſſity, reaſoning, or imitation, is an inquiry of little conſequence; our buſineſs is to point out the advantages which may be derived from it, when judiciouſly reſorted to, and the danger attending its improper uſe.

People are apt to imagine that the ſimple element of water can do no hurt, and that they may plunge into it at any time with impunity. In this, however, they are much miſtaken. I have known apoplexies occaſioned by going into the cold bath,—fevers excited by ſtaying long in it. There are alſo inſtances of maladies being ſo much aggravated by its conſtant uſe, as to be rendered incurable.

Abſurd prejudices againſt cold bathing are no leſs

blameable and injurious. As a preſervative of health its regular uſe cannot be too much inculcated. It ſtrengthens the lax fibres of children, and in all periods of life gives tone and vigour to the body, and enables the vital organs fully to perform their functions. It ſteels the frame againſt cold, damp, and changeable weather, and is the beſt preventive of diſeaſes ariſing from debility, a relaxed ſkin, or from obſtructed or exceſſive perſpiration.

Remaining too long in the water, however, is dangerous, and inſtead of ſtrengthening is apt to relax the ſyſtem and to chill the blood, cramp the muſcles, and occaſion an exceſſive flow of humours towards the head. A ſingle plunge is ſufficient, though ſwimmers accuſtomed to the water may continue their favourite amuſement for five or ſix minutes, and if in the ſea, conſiderably longer without injury.

The morning is in every reſpects the beſt time for perſons in health uſing this excerciſe, and it never ſhould be uſed immediately after dinner, after much fatigue, or when overheated. At the ſame time the body ought to have a gentle glow or temperate warmth by a little exerciſe before bathing, and after it is over, and the body rubbed dry inſtantly on coming out of the water; half an hour's exerciſe will be eſſentially ſerviceable.

With reſpect to the cold bath uſed as a remedy in diſeaſe, much will depend on the nature and ſtate of the diſeaſe; if it be a caſe of delicacy and danger, this remedy ſhould not be reſorted to without the beſt advice. In leſs eſſential ſituations, the following rules and obſervations may be of ſervice.

It is always important to conſider whether the patient have ſtrength to bear the ſhock; for although it is true that the bath is an excellent bracer in all caſes of relaxation, langour, and muſcular or nervous weakneſs, yet it muſt ever be underſtood with a proviſo that there remains ſufficient ſtamina to produce a due re-action of the heart and arteries, on which all the ſalutary effects of cold bathing depend. If the immer-

ſion be followed by an agreeable glow, and ſenſe of alacrity, it is a ſure ſign that it agrees with the conſtitution.

In ſcrophula, the cold bath, and particularly in the ſea, has been found of the greateſt ſervice, eſpecially if the ſea water be taken alſo inwardly. It will then act both as a tonic or bracer, and a detergent or purifier; and certainly a regular courſe of ſea bathing, with the internal uſe of the ſalt water, with good air, exerciſe, and a light nouriſhing diet, are the beſt means of checking the progreſs of the evil, and counteracting its morbid effects. But this is only with reſpect to the external ſymptoms of the malady, and before it has arrived at a certain pitch, or reduced the patient to extreme weakneſs. In this caſe, and wherever any external effects of the diſorder are preſent, ſalt water bathing or drinking would be extremely injurious.

In cutaneous diſeaſes in general, the cold bath ſhould not be ventured upon without medical advice. There are many of them, and many ſtages, where it would repel the eruption, and perhaps drive its ſeeds into ſome vital part, in ſpite of Nature's efforts to throw them off. In ſuch caſes the warm bath muſt have the decided preference. Wherever ſea bathing is uſed, in caſes where blotches or pimples appear externally, the ſea water ſhould be taken at the ſame time, as a moderate and cooling aperient, to carry off impurities. Half a pint taken in the morning, immediately on coming out of the ſea, and as much half an hour after, will generally be ſufficient; but if neceſſary, the doſe may be increaſed without inconvenience.

In diſeaſes of the ſkin and habit, ſea water, from the gently ſtimulating, detergent, and healing properties of its ſaline impregnation, is much preferable to river water. It cleanſes ſores, and promotes the process of granulation, and has been often known to diſcuſs ſwellings that have reſiſted the moſt powerful medicines. Deep ſeated ulcers, beyond the reach of other applications, ſometimes yield to its penetrating action.

A great advantage of the ſea water in chronic diſ-

caſes, is that it may be perſevered in for a long time. without weakening the inteſtines or the conſtitution Both the external and internal uſe of it, however, (which it is to be remembered ſhould always go together) muſt be employed at firſt only two or three times a week, and proceeding gradually till the patient can bear it properly every day; and it ſhould be gradually diſcontinued in the ſame manner.

When the cold bath occaſions chillneſs, loſs of appetite, liſtleſſneſs, pain of the breaſts, head achs, or bowel diſorders, ſuch conſequences prove its diſagreement with the patient.

But it may ſometimes be highly dangerous to try the experiment. In all obſtinate obſtructions, and in diſeaſes of the lungs or brain, as well as particular affections of the ſtomach and bowels, the conſequences may be fatal. A nervous aſthma or atrophy, may be miſtaken for a conſumption of the lungs, yet for the two firſt the cold bath is beneficial, and in the laſt, injurious and probably fatal.

Perſons of a plethoric or full habit ought not without precaution to uſe the cold bath. They run the riſk of burſting a blood veſſel, or producing an inflammation in an important part; but if they previouſly employ proper evacuants, and particularly the ſea water, for ſome time, bathing will have the beſt effects, either in plethoric or extremely nervous debilitated habits; even a ſingle dip may produce fevers, palſies, apoplexies and death.

Perſons of extreme nervous debility, however, will be much benefited by the cold bath, if not taken too precipitately. Not only women of delicate habits and weakly children, but men in the ſame perdicament, ſhould begin with the tepid bath, at the ſame degree as that of animal heat, namely, 96 degrees of Farhenheit's thermometer, and reduce it gradually, according to the increaſe of the patient's ſtrength, and internal powers of reaction.

This mode of beginning with the warm bath, reducing it gradually, and almoſt imperceptibly, till

perfectly cold, and perſevering in the cold bath, is particularly to he recommended in hyſteric and hypochondriac caſes, in rheumatic complaints, in the convulſive motions and muſcular contractions, called St. Vitus's Dance; and generally in all that branch of nervous diſorders which comprehends ſpaſms, convulſions, epilepſies, and other ſymptoms of debility, or irritability of the ſyſtem.

The principal exceptions to theſe rules, are in the treatment of ſpaſmodic affections of the inteſtines, hooping coughs, and coughs in general, convulſive aſthmas, and complaints of the bowels or cheſt, where the cold bath would at any time, and under any management, be extremely improper. In coughs, and bowel complaints, bathing the feet in warm water is of great ſervice, but to immerge the whole body either in the warm or cold bath, would aggravate the ſyſtem.

Where there are any ſymptoms of paralytic affection diſcoverable, the inconſiderate uſe of the cold bath cannot be too ſtrictly prohibited. This complaint requires a great degree of external heat; the hot bath is a ſovereign remedy. Here, and indeed in every caſe, friction ſhould never be neglected immediately after bathing.

After immoderate drinking, the cold bath ſhould never be reſorted to. It will certainly cool the body, but it will be too powerful a refrigerant, and may for ever extinguiſh animal heat; or ſhould Nature reſiſt the ſhock, ſtill it muſt increaſe the diſorder of the ſtomach, the violence of the head ach, and the derangement of the circulation, and will probably be attended with fever, or very troubleſome eruptions.

In this caſe, however, the ſhower bath, which can be eaſily procured, or which may be ſupplied by a common watering pan, may afford beneficial relief. This application is in many caſes extremely uſeful. Its action may be regulated at pleaſure; and as the water deſcends like rain, it gently impels the blood towards the lower extremities, and prevents the danger which

would ariſe from its ſudden and too rapid determination to the lungs and head, in ſome of the caſes before mentioned.

In hœmorrhages of every deſcription, cold water may be applied with good effect, as alſo in immoderate flux of the menſes; and in the interval of menſtruation, cold bathing and drinking chalybeate waters. But where the diſcharge of blood proceeds from affections of the brain, lungs, &c. or is habitual, as in piles, nothing could be ſo improper as to check the evacuation.

In gout and all its ſymptoms, cold bathing would repel the diſorder, and probably throw it into ſome vital part.

Although the warm bath is in general to be recommended in obſtructions of the menſes: there are caſes of retention after the uſual age, when the cold bath may contribute to reſtore the tone of the ſyſtem; of theſe, however, a skilful phyſician muſt judge.

Perſons returning from a hot climate, will find the warm bath not only ſafer than the cold, but more conducive to reſtore their ſtrength. It may be reduced by degrees to the cold bath, as recommended in caſes of debility.

CHAP. LVI.

OF MINERAL WATERS.

MINERAL waters are claſſed as hot and cold, and as Chalybeate—Saline—Sulphureous, and Calcareous, as they are impregnated with iron, ſalts, ſulphur, or lime.

Chalybeates may be diſtinguiſhed as ſimple chalybeates, having no prominent impregnation but iron, and ſaline or purgative chalybeates, having a ſtrong mixture of purging ſalt, which are very different from the other, both in taſte and effect. Tunbridge is at

the head of the former, and Cheltenham of the latter claſs.

The Tunbridge waters greatly ſtimulate the relaxed nerves and brace the ſyſtem; afford relief in flatulencies, bilious vomitings, irregular digeſtion, and other conſequences either of debility or intemperance, and promote the circulation of the blood, and the various ſecretions. They are particularly ſerviceable in obſtructions of the menſes; but in floodings they are injurious. They are beneficial in obſtructions of the urinary paſſages; and may be uſed with great advantage in chronic diſeaſes which ariſe from ſlow beginning, and are attended with laxity of the ſolids, without much organic diſeaſe. But if the weakneſs proceed from morbid affections of the meſentery, lungs, or other important organs, they are improper.

Plethoric perſons ſhould not uſe theſe waters, without blood letting, or other gentle attenuants.

They are often at firſt an active purgative, but their continued uſe is rather apt to produce coſtiveneſs; in which caſe, gentle laxatives are neceſſary. The water itſelf may be converted to a purgative chalybeate, by the addition of a little magneſia or Glauber's ſalts. In the removal of obſtructions, the warm bath is alſo recommended.

At firſt, the patient ſhould take a quarter of a pint half an hour before breakfaſt, repeating the ſame at intervals in the forenoon, and augmenting the doſes according to the ſenſations they excite. The uſual hours for theſe doſes, are eight, ten, and twelve o'clock. At firſt, however, they ſhould not be taken faſting.

They may, in the firſt inſtance, produce giddineſs, naufea, vomiting, pain of the head and of the heart, and ſenſe of fulneſs over the whole body; but unleſs theſe ſymptoms continue obſtinately, they ſhould not be conſidered as unfavourable. It is a judicious practice to immerge a bottle of the chalybeate in hot water to take off the chill.

The waters of Iſlington and Hampſtead, are in their qualities not much inferior to the Tunbridge.

A great matter, however, in the uſe of all the waters, is to attend to a proper regimen. Pure air, temperate living, early and regular hours, active diverſions, agreeable company and relaxation from buſineſs, are eſſentially neceſſary.

The waters of the German ſpa and Pyrmont being more active, their uſe requires greater caution.

The Spa water is four times as ſtrong as the Tunbridge, and of courſe the doſe muſt be proportionate. At firſt a ſufficient quantity of warm water mixed with it will be uſeful both to reduce it, and bring it to a temperature proper for the conſtitution of the patient; and here it is particularly indiſpenſible for perſons of a plethoric habit previouſly to uſe attenuants.

The Pyrmont waters contain as much iron, and twice as much fixed air as thoſe of the German ſpa; a neceſſary and appropriate caution muſt therefore be obſerved. The waters of Pyrmont and Spa afford the moſt refreſhing and wholeſome draught, to relieve in the morning a weakneſs of the ſtomach occaſioned by too free uſe of the bowl or the bottle the night before.

Pyrmont waters, when diluted with new milk, are found very ſerviceable in gouty caſes. and may be ſafely preſcribed in this form, during the intervals of the fits and the abſence of inflammatory ſymptoms.

Thoſe waters may be conveyed to any diſtance, and will retain their medical properties, with little or no diminution, for two years, if incloſed in bottles well corked and covered with cement. They contain ſo much fixed air, that it is uſual, after filling the bottles, to leave them uncorked for a while, to let the exceſs of the fixed air eſcape.

Purging chalybeates, as thoſe of Cheltenham and Scarborough, beſides their iron impregnation, contain ſuch a portion of purgative ſalt as to give them a regular determination to the bowels. On firſt drinking they are apt to excite a giddineſs and ſlight head ach; but this ſoon goes off, and their good effects are ſenſibly

felt. Of all laxatives they are perhaps the moſt agreeable, as they never occaſion griping or languor. They improve the appetite, give tone to the ſtomach, promote vivacioufneſs, and cleanſe the body. Half a pint repeated three or four times a day, is enough for any patient; but this muſt be determined by the habit and the effects they produce. When taken as an alterative, a conſiderably ſmaller quantity will of courſe ſuffice. The beſt time to take them is ſummer, and they may be well accompanied with the warm bath. They are beneficial in glandular and viſceral obſtructions, in the firſt ſymptoms of dropſy, in ſcrophula, in bilious complaints, and in ſcorbutic eruptions.

The Scarborough waters contain not above one third of the purging ſalts of thoſe of Cheltenham, and thus act for the moſt part only as an alterative, unleſs when they receive the addition of ſome purgative ſalt, ſimilar to what they hold in ſolution. Scarborough, however, to counterbalance this, enjoys an uncommon ſalubrious air and excellent ſea bathing; and there is here alſo a ſimple chalybeate ſpring, convenient for patients where a determination to the kidneys may be deſireable.

Simple ſaline mineral waters are of the ſame nature, but not ſo ſtrongly impregnated with purging ſalts, nor ſo efficacious as ſea water. They are numerous about the metropolis; as Bagnigge wells, the Dog and Duck, Kilburn, and Acton; but they are now of little repute. When they were in vogue it was uſual and neceſſary to add a further ſolution of a ſimilar ſalt.

The moſt celebrated ſaline water is that of Seltzer, which may be ſaid to form a particular ſpecies, being alſo ſlightly alkaline, with a ſtrong impregnation of fixed air. A great deal of it is brought to this country, and to preſerve its virtue it muſt be inſtantly bottled, and kept cloſe corked, otherwiſe the fixed air will quickly evaporate, and the water become not only vapid, but putreſcent. If well preſerved, it ſparkles when poured into a glaſs, and has a gently ſaline and ſomewhat pungent or acidulous taſte. One of the

ſtone bottles in which it is imported, may be taken in a day at three intervals. It is by no means diſagreeable to the taſte, and its effects are generally exhilirating. In caſes of hectic fever it is very ſerviceable diluted with milk. It corrects expectoration, checks ſweating, aud contributes much to the patient's repoſe.

Its rapid determination to the kidneys, the action of its ſtimulus, and perhaps ſome power as a ſolvent, concur to produce very agreeable effects from it, particularly in nervous affections of the ſtomach and bowels, indigeſtion, bile, acidity, heartburn, ſpaſmodic pains in the alimentary canal and diſeaſes of the urinary organs. In theſe caſes, with the addition of a proper quantity of vitriolated magneſia, taken every two or three days, it will form a proper aperient.

Several of the foregoing waters have a ſlight impregnation of ſulphur; but there are alſo waters where this is the chief ingredient, and which are accordingly termed ſulphureous. The principal of theſe is Harrowgate.

Great benefit has been derived from the proper uſe of the Harrowgate waters in eruptions of the ſkin, in rheumatiſms combined with ſcurvy, in obſtructions, and in diſorders of the firſt paſſages; acidity, indigeſtion, vitiated bile, worms, putrid ſores, piles, and jaundice. They anſwer two important purpoſes: firſt, acting as an alterative, and inducing, by a mild operation, a gradual change in the habit; and ſecondly when employed in larger doſes, are an eaſy and delicate purge, which does not weaken the patient ſo much as other laxatives. There are alſo at Harrowgate, baths of the ſame mineral, which in many diſorders are a powerful auxiliary to the drinking.

It only now remains to ſpeak of the calcareous minerals, better underſtood under the deſcription of hot ſprings. Of theſe the hot ſprings of Bath have a decided ſuperiority.

The Bath waters, drank freſh from the ſpring, increaſe heat, raiſe the pulſe, and excite the ſecretions, acting at the ſame time on the nervous ſyſtem.

They not only promote perſpiration and urine, but increaſe ſaliva, and quench the thirſt better than any other liquid, but ſhould not be taken when there is any tendency to fever. The relief they afford in colics and convulſive retchings attending the gout in the ſtomach, and ſimilar affections, evince their antiſpaſmodic powers.

This, like the ſaline mineral, is ſtrongly purgative, and as conſtant purging for months together muſt debilitate the ſtrongeſt conſtitution, the popular idea of perſeverance in its uſe ſhould be corrected. Purging is often neceſſary in acute diſeaſes to cleanſe the body, and in chronical caſes it may pave the way for the operation of other medicines; but it will ſeldom effect a cure, and by exhauſting the patient, will generally leave him in a worſe condition than it found him. A powerful ſtimulant like ſulphur, however uſeful when taken in moderation and at proper intervals, muſt if improperly and habitually employed, weaken and deſtroy the digeſtive organs.

Thoſe who take the ſulphureons or ſaline waters to cure any obſtinate malady, ſhould uſe them as an alterative, and ſo as to produce hardly any effect on the bowels. With this view a half pint glaſs may be taken at bed time, but by no means after eating a hearty ſupper; and the ſame quantity an hour before breakfaſt, dinner, and ſupper, varying the doſe according to the chalybeate.

Theſe waters give a great ſtimulus to the appetite, but it ought to be checked. A light and rather diluting food is moſt proper, but no perſon during ſuch a courſe ſhould eat to the full extent of his ſtomach. Moderate exerciſe, and exhilirating amuſements, are elſe highly neceſſary.

The Bath waters uſed externally, unite all the virtues of warm baths, and may be uſed of any heat, from one hundred and ſix degrees and under; the baths are alſo commodious and extenſive, ſo as to afford the patient room to move freely about in them, with a uniform warmth. They are more ſtimulant than the common warm bath, raiſe the pulſe and heat of the body

o a higher degree, without being violently ſudorific; ney are an excellent diuretic, and inſtead of debili- ating, they impart vigour and alertneſs, and promote he appetite.

The diſeaſes in which they are to be recommend- ed, are: green-ſickneſs before it is gone too far; viſceral obſtructions; palſy; gout, when the inflam- matory ſymptoms have abated; and ſwellings of the knee; hypochondria; weakneſs of the organs of digeſ- tion; colic; jaundice, when ariſing from obſtruction of the biliary ducts; hyſterics; ſpaſmodic affections of the womb, and painful menſtruation; and in cutaneous and leprous eruptions.

It is ſafeſt to begin with a wine glaſsful before break- faſt. If this feel eaſy and cordial, and excite no pain or ſenſe of fullneſs in the head or eyes, it may be re- peated at noon, and increaſed by degrees as it ſuits the the conſtitution.

The Croſs-water bath, the warmth of which when freſh from the ſpring, is one hundred and twelve de- grees, is uſually recommended to begin with. After that, the King's or hot bath, which is four degrees higher in temperature, may be reſorted to.

In reſpect to the bath, the patient ſhould at firſt con- tinue in it only five or ſix minutes. Should this pro- duce no diſagreeable ſymptoms, but improve the health, ſtrength, and ſpirits, it may be gradually increaſed, till even half an hour, but never ſo as to create laſſitude or faintneſs. The waters of the hot bath are twelve degrees warmer than the croſs bath, which is a much greater difference than at the pumps.

There are alſo private baths of any temperature to ſuit the patient's habit or complaint. The beſt time for bathing is early in the morning; and it may be re- peated twice, or at moſt thrice a week. A partial bathing is in many reſpects preferable to a total im- merſion.

Buxton waters approach neareſt to thoſe of Bath of any in the kingdom; but their temperature is only eighty two degrees.

Taken internally in doſes of near a pint before breakfaſt, and as much before dinner, they afford relief in flatulence, heartburn, nauſea, and indigeſtion and affections of the kidneys and bladder. As a bath, they contribute to reſtore the action of limbs that have loſt their power from violent inflammation, either occaſioned by external injury, or preceding acute rheumatiſm; but if it be the conſequence of a paralytic ſtroke or gout, the warmer temperature of the Bath waters afford more benefit.

Matlock tepid ſprings are ſixteen degrees cooler than thoſe of Buxton, and form a good intermediate bath between Buxton and the ſea. They are, therefore, properly employed in preparing invalids for the latter, when this is neceſsary to complete a cure. Taken internally they have little medicinal virtue.

The hot well of Briſtol is of an intermediate warmth between Buxton and Matlock, being ſeventy four degrees. It is not uſed to bathe in, but has acquired great reputation in conſumptive caſes. Part of its virtues in this obſtinate complaint muſt be aſcribed to the mild ſheltered, yet ventilated, ſituation of the hot wells, and to the rational plan of diet, excerciſe, and amuſements, purſued there.

It is alſo efficacious in relaxations of the ſtomach or bowels, occaſioned by long reſidence in hot climates, bilious diarrhœa, dyſentery, and diabetes. A regular courſe of theſe waters is excellent in quenching the thirſt, keeping the skin moiſt, allaying fever, and correcting a preternatural diſcharge of urine. Being impregnated with little purgative ſalt, aperient medicines ought in many caſes to accompany their uſe.

The full doſe is half a pint, drank early in the morning, and repeated before breakfaſt, after an interval of half an hour's gentle exerciſe. The ſame two doſes to be repeated midtime between breakfaſt and dinner.

Of the hot ſprings on the continent, at the German ſpa, Aix la Chapelle, Bareges, Bourbon Loncey, Prudel, and others, it is unneceſsary here to go into any particular notice. Perſons intending to uſe theſe will

require much more detailed accounts of their virtues and uſe than the limits of the preſent work would permit.

On the ſubject of mineral waters, it is only neceſsary to add, that artificial minerals of all kinds are now made, fully equal in their virtue to the natural ones, and with this important ſuperiority, that they can be made to any degree of ſtrength; a circumſtance which cannot fail in time to render this beneficial curative more generally diffuſed.

CHAP. LVII.

OF THE COW-POX.

IT is to be regretted, as has already been obſerved under its proper head, that notwithſtanding the beneficial effects of inoculation for the ſmall pox, yet from its not being general, or confined to one ſeaſon of the year, and thus diffuſing the diſeaſe by contagion among the uninoculated, its introduction into Europe has been injurious rather than ſalutary. Dr. Heberden obſerves, that he examined carefully the bills of mortality, and by comparing the deſtruction occaſioned by the ſmall pox among our countrymen, before and ſince inoculation, was reluctantly brought to this melancholy concluſion, that at the preſent period the proportional *increaſe of deaths* from this diſeaſe, was as *five* to *four* *.

The ſubject of regret we hope and truſt will ſoon be remedied, and this moſt deſtructive disorder be totally eradicated by the introduction of the *cow pox*, and the general employment of that certain and ſafe preventive

* The following paragraph is copied from the British Preſs of August 2, 1805.

"We have great reaſon to regret the perverſeneſs and ill-timed predetermination of a great number of the lower claſſes of the people in this country. Nearly *twenty children* have been buried out of, and near to Leg court, Peter ſtreet, Weſtminſter, within the laſt *three weeks*, of the *ſmall-pox*."

through the laudable exertions of the Royal Jennerian Society. Here, indeed, there is the ſame prejudice to contend with as in the inoculation for the ſmall pox. From it being, as yet, only partially uſed, the deaths from the ſmall pox are ſcarce ſenſibly diminiſhed; whereas at Vienna, where it is general, the ſmall pox is already almoſt eradicated, and the deaths from this diſorder reduced to near nothing.

It would, perhaps, be no improper meaſure to paſs an Act of Parliament, obliging all perſons, of every age and ſtation, whether they have had the ſmall pox or not, to be inoculated with the cow pox at the ſame time. Although ſuch a compulſory meaſure may appear inimical to freedom, and would probably introduce a momentary diſcontent, the reſult would almoſt immediately give univerſal ſatisfaction, and thus by one blow, one of the moſt fatal ſcourges of the human race would be baniſhed from the United Kingdom.

It would be afterwards neceſsary to compel every perſon, whether native or foreigner coming from abroad, to undergo the operation; and it would alſo perhaps be ſafe at leaſt for a time, to oblige parents to inoculate their future offspring, within a certain time after their coming into the world.

It is not intended here to go into details reſpecting this preventive, for it can hardly be called diſeaſe. The numerous publications on this ſubject, although extremely valuable, are intended only for the medical and ſcientific reſearchers; and it will be here ſufficient to point out the advantages reſulting from this practice; the mode of performing the operation; and the treatment under it.

Various caſes have been brought forward with laudable induſtry to ſhew the inefficacy of the vaccine inoculation as a preventive of the ſmall pox. On theſe it is obſerved,

I. They are ſo few out of the innumerable thouſands who have been inoculated for the cow pox, as to be like a drop of water in the ſea; and the caſes themſelves are by no means deciſive.

II. There are few rare inſtances of perſons inoculated for the ſmall pox, afterwards having them in the natural way.

From the oral teſtimony taken before a Committee of the Houſe of Commons, they report the following reſult:

"That the diſcovery of vaccine inoculation is of the moſt general utility, inaſmuch as it introduces,

"A milder diſorder in the place of the inoculated ſmall pox,

"Which is not capable of being communicated by contagion,

"That it does not excite other humours or diſorders in the conſtitution,

"That it has not been known in any one inſtance to prove fatal,

"That the inoculation may be ſafely performed at all times of life (which is known not to be the caſe with regard to the ſmall pox) in the earlieſt infancy, as in old age, as alſo during pregnancy,

"And, Laſtly, that it tends to leſſen, and if its uſe becomes univerſal, muſt abſolutely extinguiſh, one of the moſt deſtructive diſorders by which the human race has been viſited."

The written evidence which was alſo received, relates to the very extenſive and ſucceſsful practice of this inoculation in every quarter of the globe, the efficacy of which does not ſeem abated by the cold of the northern, nor the heat of the ſouthern or tropical climates.

After this ſolemn reſolution of a Committee of the Houſe of Commons, and after the general conviction of the moſt eminent phyſicians, who are proverbially faſtidious in the introduction of any new practice, can any perſon of ſenſe doubt the efficacy of vaccination; can any heſitate to communicate it to a child? Shall it be ſaid that in this enlightened country, ſuch evidence as is already mentioned, is refuſed; while the moſt improbable tales of every quack are believed, of the efficacy of his noſtrum?

The cow pock is a ſort of a mild diſorder of puſtules on the teats, to which this animal is ſubject, and which is prevalent in Glouceſterſhire, Dorſet, Somerſet, Hants, Middleſex, Norfolk, Bucks, Oxford, Leiceſter, and Stafford. It has been alſo traced in Ireland, Italy, and other parts of the continent. This diſorder is communicated to the milkers, and it having been obſerved that no perſon who had it was ever after affected with the ſmall pox, or that it ever proved fatal, Dr. Jenner, a name more illuſtrious than all the heroic deſtroyers of mankind, made a full inveſtigation of the facts, and proved, that the inoculation firſt from the cow, and then transferring the cow pox from one human being to another indefinitely, may be done without any diminution of its ſpecific power; and that it is a complete preſervative againſt the ſmall pox. For this invaluable diſcovery Parliament liberally and properly rewarded this great friend of the human race with 10,000l. He has alſo received the moſt ample teſtimonies of gratitude and approbation from the moſt illuſtrious bodies in all nations; and, laſtly, he enjoys a reward paramount to all theſe, a conſciouſneſs that his diſcovery will preſerve the lives of more millions than all the conquerors of Europe have ever deſtroyed.

An objection is made to the employment of vaccination, on account of its being the diſeaſe of a beaſt transferred to the human frame. It is ſo; and what then? If it produce the deſired effect, what matters it whence it proceeds? Beſides, does any one ſcruple to take milk from the ſame beaſt? Does any one heſitate to eat its fleſh; and ſhall we object to take any other good it affords, for no other reaſon than becauſe it is a beaſt? Such an objection is completely anile; but every ſuch objection requires notice and refutation in a popular work of this nature.

The mode of inoculation is extremely ſimple:—a lancet being held upright, is made to puncture the puſtule on the ſixth, ſeventh, or eighth day. There ſoon iſſues a globule of the cow pock matter, which

keeps gradually riſing on the ſurface. The point of the lancet is immerſed in this fluid, and in the ſame direction, without raiſing blood, inſerted between the outer and inner ſkin of the arm above the elbow; then being withdrawn, it is wiped over the inoculated part. To prevent failure, two ſeparate inſertions may be made. Inſtead of a lancet, a common needle, or even a pin, will fully anſwer the purpoſe, and neither ſo much as frighten the child, or be ſo apt to draw blood.

The cow pock being a local diſeaſe, uſually without much conſtitutional affection, there is ſeldom required any medical attention, and that only as far as regards the puſtule. Should this become inflamed, which will be determined about the tenth or eleventh day, nothing more is required than to apply a ſingle drop of acitated litharge water on the puſtule, and having ſuffered it to remain two or three minutes, to cover the efflorescence ſurrounding the puſtule with a piece of linen dipped in litharge water. The former may be repeated twice or thrice a-day; the latter as often as it may feel agreeable to the patient.

When the ſcab is prematurely rubbed off, a circumſtance not unfrequent among children and working people, the application of a little acitated litharge water to the part, immediately coagulates the ſurface, which ſupplies its place, and prevents a ſore.

It is only neceſſary to get the true vaccine matter, as there is a ſpurious ſort, which is inefficacious. Of this, however, there can be no difficulty. It may be always had at any of the ſtations of the Royal Jennerian Society.

To ſum up the whole, the following comparative view of the effects of the natural ſmall pox, the inoculated ſmall pox, and the inoculated cow pox, will moſt forcibly recommend the employment of the latter.

The *natural ſmall pox* is contagious, and ſometimes violent, painful, loathſome, and fatal——one perſon in ſix dies of it. In the United Kingdom, 40,000 die

of it annually—one in three has it in a dangerous form—the eruptions are numerous, painful, and diſguſting—it requires confinement, loſs of time, and more or leſs expence—precautions againſt it are moſtly unavailing—medical treatment is neceſſary both during the diſeaſe and afterwards—it occaſions pits, ſcars, ſeams, &c. eſpecially on the face—it induces ſcrophula, diſeaſes of the ſkin, glands, joints, blindneſs, deafneſs, &c. &c.

The *inoculated small pox* is contagious, generally mild, but in ſome inſtances attended with all the violence, diſguſtingneſs, and danger of the natural—one in three hundred inoculated dies; in the United Kingdom probably twelve hundred annually—one in thirty or forty has the diſeaſe in a dangerous form—forms eruptions more or leſs—requires confinement, loſs of time, and expence—neceſſary preparation by diet and medicine; care to avoid certain ſeaſons, as extremities of heat and cold; certain periods of life, as early infancy and old age, and certain ſtates of conſtitution, as general ill health, teething, pregnancy, &c.—medical treatment uſually neceſſary—deformities liable to take place whenever the diſeaſe proves ſevere—induces ſubſequent diſeaſes, though not ſo frequently as the natural ſmall pox.

The *inoculated cow pox* is not contagious—it is uniformly mild and inoffenſive, and not loathſome—never fatal—attended with no danger—forms no eruption, except a puſtule on the inoculated part—needs neither confinement, loſs of time, nor expence—requires no medicines—occaſions no ſubſequent deformity or diſfiguration, and laſtly, induces no ſupervenient diſeaſe.

CHAP. LVIII.

OF THE RECOVERY OF DROWNED PERSONS.

OF the numerous philanthropical and charitable inſtitutions of this country, none is more meritorious in its purpoſes, nor more ſucceſsful in its effects, than the Royal Humane Society. By its exertions, many uſeful members have been reſcued from a premature death: many hapleſs individuals prevented from the daring crime of ſuicide. To ſecond as much as poſſible the benevolent intentions of this inſtitution, we ſhall give a few rules and obſervations on this important ſubject, to enable every individual to give aſſiſtance in a critical moment, when a time cannot be ſpared to procure medical relief.

While there is the leaſt proſpect or chance of a ſpark of the vital power remaining, in this or any other ſpecies of ſudden death, no means or perſeverance ſhould be ſpared to reſtore life.

When a body is taken out of the water apparently dead, care muſt be taken to carry it in a proper poſture, and as much as poſſible with the head erect, to a ſuitable place, where the nececeſſary operations for recovery can be performed.

The principal object to be purſued is, to reſtore the natural warmth, on which all the vital functions depend, by application of ſtimulants, not only to the ſkin, but to the lungs and inteſtines.

The body being ſtripped, muſt be ſtrongly rubbed for a conſiderable time with linen cloths, made as hot as poſſible, and the patient laid in a bed completely warmed, as quickly as can be, and the friction being continued, warm cloths ought to be applied to the ſtomach and belly, and hot bricks, or bottles of hot water, to the ſoles of the feet.

Strong volatile ſpirits ſhould be frequently applied to the noſe, the ſpine of the back, and pit of the ſto-

mach rubbed with warm ſpirits; the temples ſhould alſo be rubbed with volatile ſpirits, and ſtimulants, as tobacco, blown up the noſtrils.

A perſon ſhould blow with all his force into the patient's mouth, holding his noſtrils at the ſame time. When from the riſing of the cheſt or belly it appears that the lungs are thus filled with air, the blowing ſhould be ſuſpended, and the perſon preſs the breaſt and belly, ſo as to diſpel it; and alternally inflate and depreſs the lungs in this manner for ſome time, ſo as to imitate natural breathing. Or a pair of bellows or blow pipe may be uſed, more powerfully than the mouth (but not ſo efficacious in other reſpects), ſtopping the noſtrils as much as poſſible.

To ſtimulate the inteſtines, the ſmoke of tobacco may be thrown up as a clyſter, and for want of a proper apparatus, a common tobacco pipe may be uſed for this purpoſe. The bowl of the pipe muſt be filled with tobacco well kindled, and the ſmall tube being introduced into the fundament, the ſmoke may be forced up by blowing through a piece of paper full of holes, wrapped round the mouth of the bowl, or by blowing through an empty pipe, the mouth of which is applied cloſe to the other. Should it be found impracticable to throw up the fumes of tobacco, clyſters of warm water, with a little ſalt, or ſome wine or ſpirits, may be repeatedly adminiſtered, by means of a common clyſter bag and pipe, or ſtill better by a pretty large ſyringe.

In the mean time a warm bath ſhould be prepared, and the patient put into it, ſhould the above means fail; or, where this cannot be had, the body ſhould be covered with warm ſalt, aſhes, ſand, grains, or ſuch other ſubſtances as are at hand.

Till the patient ſhew ſigns of life, no attempts muſt be made to pour liquors into his mouth, but his lips and tongue may be wetted with a feather dipped in warm ſpirits, and as ſoon as he has recovered the power of ſwallowing, a little warm wine or cordial ought every now and then to be adminiſtered. After the

patient is a little reanimated, ſome gentle means may be uſed to occaſion vomiting, as tickling the throat with a feather, or adminiſtering ſtrong chamomile or ſage tea; but no powerful emetic is to be attempted.

Still the warm and ſtimulating applications are to be perſevered in, and ſmall quantities of ſome cordial liquors ought frequently to be adminiſtered. Should the perſon, after being perfectly reanimated, retain an oppreſſion or cough, he ought to be blooded, and drink plentifully of barley water, or other ſoft pectoral.

Perſons apparently deprived of life by any accident, ſhould be treated in nearly the ſame manner.

We cannot conclude this article better, than by a verbatim copy of the card publiſhed and circulated by the Royal Humane Society.

CAUTIONS

RECOMMENDED BY

THE ROYAL HUMANE SOCIETY.

1. Never to be held up by the heels.
2. Not to be rolled on casks, or other rough usage.
3. Avoid the use of salt in all cases of apparent death *.

THE DROWNED.

1. Convey carefully the body, with the head raised, to the nearest convenient house.
2. Strip and dry the body; clean the mouth and nostrils.
3. Young children between two persons in a warm bed.
4. An adult.—Lay the body on a blanket or bed, in a warm chamber, in winter; to be exposed to the sun in summer.
5. It is to be gently rubbed with flannel, sprinkled with spirits;—a heated warming pan, covered, lightly moved over the back and spine.

* Warm flannel, lightly sprinkled with spirits.

6. To restore breathing—introduce the pipe of a pair of bellows (when no apparatus) into one nostril; the other, with the mouth closed, inflate the lungs, till the breast be a little raised; the mouth and nostrils must then be let free;—repeat this process till life appears.

7. Tobacco smoke is to be thrown gently into the fundament with a proper instrument, or the bowl of a pipe covered, so as to defend the mouth of the assistant.

8. The breast to be fomented with hot spirits; if no signs of life appear, the warm bath; or hot bricks, &c. applied to the palms of the hands and soles of the feet.

9. Electricity, early employed, by a medical assistant.

INTENSE COLD.

Rub the body with snow, ice, or cold water.—Restore warmth, &c. by slow degrees, and after some time, if necessary, the plans may be emyloyed for the resuscitation of drowned persons.

SUSPENSION BY THE CORD.

1. A few ounces of blood may be taken from the jugular vein, and cupping glasses may be applied to the head and neck; leeches also to the temples.

2. The other methods of treatment, the same as recommended for the apparently drowned.

SUFFOCATION BY NOXIOUS VAPOURS ON LIGHTNING.

Cold water to be repeatedly thrown on the face, &c. drying the body at intervals. If the body feels cold, employ gradual warmth; and the plans of the drowned.

INTOXICATION.

The body is to be laid on a bed, &c. with the head a little raised; the neckcloth, &c. removed. Obtain immediately medical assistance, as the modes of treatment must be varied according to the state of the patient.

GENERAL OBSERVATIONS.

1. On signs of returning life, a tea spoonful of warm water may be given; and, if swallowing be returned, warm water or diluted brandy. To be put into a warm bed, and if disposed to sleep, will generally awake restored to health.

2. The plans above recommended are to be used for three or four hours. It is an absurd and vulgar opinion to suppose persons as irrecoverable, because life does not soon make its appearance.

3. Electricity and bleeding never to be employed, unless by the direction of the medical assistants.

CHAP. LIX.

OF RUPTURES.

A RUPTURE is a diſorder occaſioned by a diſplacement of the bowels or inteſtines.

When the inteſtines or other contents of the belly obtrude at the navel, it is called a *navel rupture*—when forced through the inſertions of the muſcles of the belly, it is called *ventral*—when in the groin, *inguinal*, and when in the upper part of the thigh, *femoral*.

The deſcent of the bowels uſually takes place in ſuch parts of the belly as are weakeſt. It is occaſioned by immoderate laughter, crying, coughing, over exertion of bodily ſtrength, leaping, falls, blows, fatigue, riding, immoderate grief, and difficult parturition. Perſons afflicted with a general laxity of body, are particularly liable to ruptures.

On the firſt appearance of the diſorder, every means ſhould be taken to return the inteſtines; it is much more difficult to cure after long continuance. The truſs is the moſt effectual remedy, and it ſhould be fitted with every poſſible exactneſs to whatever part of the body it is applied. A cuſhion or compreſs, poſſeſſing a ſufficient degree of ſoftneſs and reſiſtance, ſhould be placed between the pad of the truſs and the groin; for this purpoſe take three ſlips of calico, twenty inches long and three broad; fold them into a ſquare form. For young perſons and children the ſize muſt be in proportion. The patient ſhould on no account apply the truſs himſelf on the firſt appearance of the rupture, but ſubmit it entirely to the ſurgeon, whoſe province it is to determine whether the whole of the inteſtines be returned, or part remains in the opening through which they deſcended. In the latter caſe,

the application of a truſs would be highly injurious. But if the aſſiſtance of a ſurgeon cannot immediately be had, the patient muſt give up all exerciſe and labour; immediate reſt becomes eſſential, and his poſition ſhould always be with the head lower than the body.

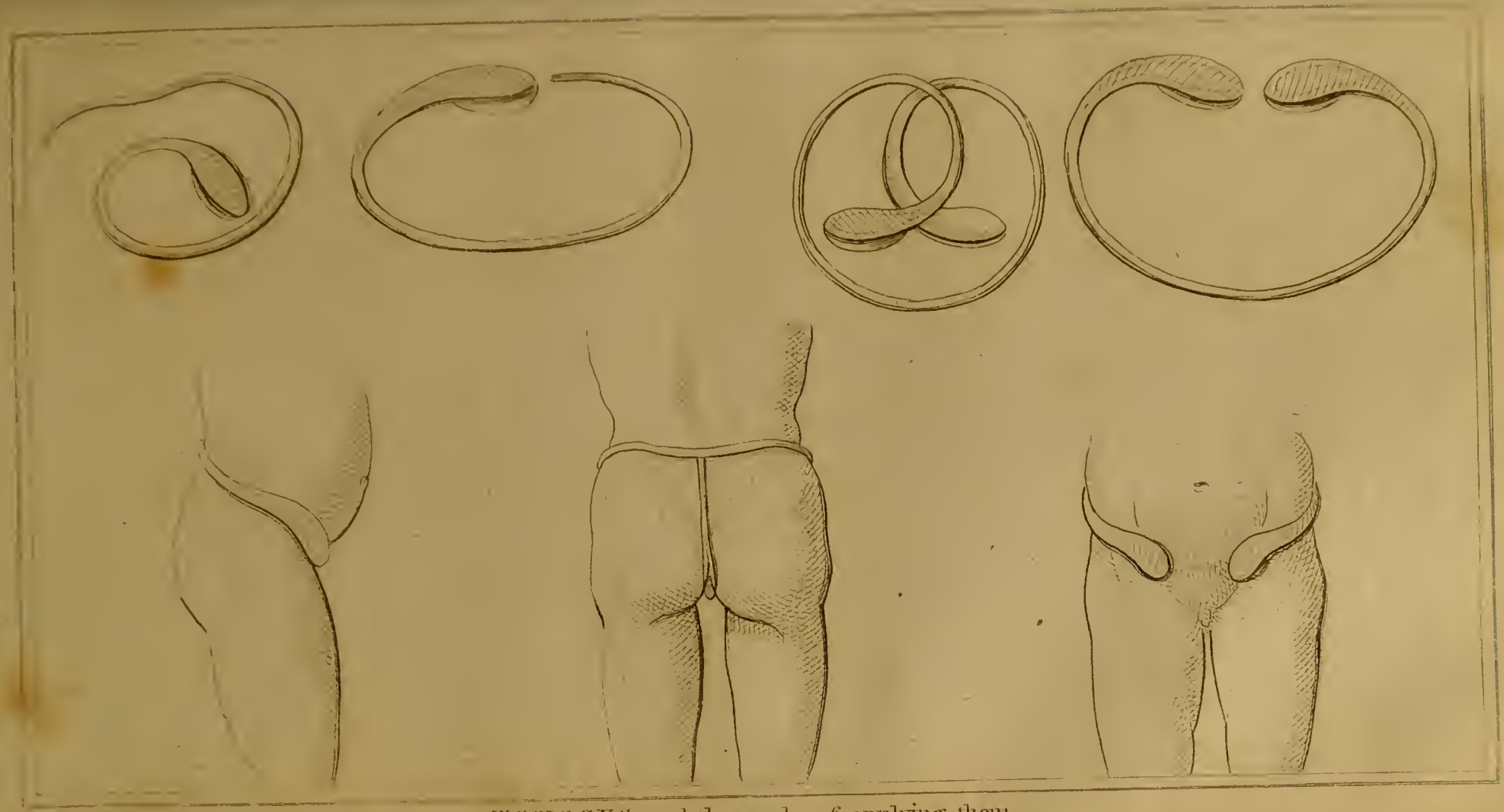
To favour a return of the inteſtines, the feet of the patient ſhould be placed over the ſhoulders of another perſon, and his body be permitted to hang dowwards, jolting him a good deal at the ſame time.

At this moment a gentle preſſure of the hands and fingers ſhould be made. The perſon operating in this way ſhould graſp the ſwelling with one hand at the bottom, while with the fingers of the other he attempts to puſh gently the contents of the tumour into their place, obſerving that the parts laſt deſcended be firſt reduced.

The patient when in bed ſhould ſuffer the part affected to reſt on his hand, and all exertion ſhould if poſſible be avoided.

When the return of the gut cannot be effected by the means above mentioned, apply repeatedly cold water, or ice if it can be procured. If not, in order to increaſe the coldneſs of the water, diſſolve into a quart of it, two ounces and a half of crude ſal ammoniac, making a farther ſolution as it loſes its cooling quality. If theſe bathings do not ſucceed in ten or twelve applications they muſt not be repeated. Should neither ice nor ſal ammoniac be ready to be had, mix the water with an equal quantity of vinegar. An injection of cold water may be likewiſe adminiſtered with great effect with a pewter ſyringe, containing a pint or a pint and a half. Daſhing cold water on the legs and thighs, in caſes of difficult reduction, has been alſo recommended.

In addition to the above refrigerants, the following warm application ſhould be made to the belly. Take an ox's bladder, two thirds full of warm water, and cover it with flannel to prevent any moiſture from



TRUSSES, and the mode of applying them.

touching the body. Apply this ſo as to cover the whole belly above the tumour, and at the ſame moment let the cold bathings before mentioned be made directly to the ruptural part.

If the patient be coſtive, with ſickneſs at the ſtomach, internal medicines ſhould not be adminiſtered, but clyſters made of half a pint of camomile tea, two table ſpoonfuls of oil, and one ſpoonful of common ſalt, ſhould be thrown up, or one dram, or a dram and a half of ſoap, diſſolved in a pint of warm water, will anſwer the purpoſe much better than an injection of tobacco ſmoke, which has been generally recommended. One of theſe clyſters ſhould be repeated every three or four hours till evacuation be obtained. If fever attend, the patient ſhould loſe a little blood.

When the patient goes to ſtool he muſt not ſtrain, but take time, and diſcharge the fæces without violence. He muſt alſo keep his hand on the diſeaſed part, with a conſiderable degree of preſſure, to prevent the bowels from farther deſcending, and ſhould do the ſame when the truſs is applied. An increaſed preſſure on the pad will be neceſſary at the time of voiding.

The patient muſt be extremely careful in removing the truſs either by night or day, till every apprehenſion of its return be done away; he muſt likewiſe take care to keep the pad from ſhifting. In a certain time he may be informed that he can ſleep in ſafety without it; but to avoid a return of the diſeaſe, he muſt not remove it but when in bed, and lying on his back with his feet drawn cloſe up. Previous to his riſing in the morning, he muſt reſtore the truſs to its former ſituation, with as little motion as poſſible, and take care that all his movements be gently and with caution.

The irreducible hernia, or ruptures of long ſtanding, are where the contents have fallen into the purſe, and formed adheſions to its ſides, or from the quantity of the inteſtines that have deſcended, have experienced an alteration in the form or texture, ſo as to render them incapable of being returned. In this caſe the

ſteel truſs recommended for ruptures of the groin, would be injurious. A bag or ſuſpenſory truſs in this ſituation is recommended to ſupport the loaded ſcrotum. When the tumour is very large, a ſoft quilted bolſter ſhould be worn at the bottom of the ſuſpenſory, to prevent excoriation, and the ſcrotum ſhould be frequently waſhed. An attention to the ſtate of the bowels in every ſpecies of rupture is eſſential, but particularly in this ſtate of the diſorder.

After the rupture hrs been reduced, and while wearing the truſs, the parts ſhould be daily bathed with either of the following cold aſtringent waſhes.

Take of oak bark two ounces and water three pints, and boil them together over a ſlow fire till they be reduced to one quart; ſtrain them, and add half an ounce of alum. Let the mixture ſtand till it be perfectly cold, before applying it.

Theſe bathings are to be applied in the morning after the patient gets up. He muſt lie down on his back, and gently looſe the truſs, and raiſe the pad to prevent it being wetted. Four or five folds of linen ſoaked in the above lotion, muſt then be applied to the part, and ſuffered to remain till it has loſt its coldneſs; when it ſhould be repeated and continued eight or ten minutes. Medicines of a tonic or ſtrengthening nature ſhould alſo be adminiſtered, as Peruvanian bark, or chalybeate waters, natural or artificial. The food muſt be light and of eaſy digeſtion, particularly avoiding oily ſubſtances, and ſuch as produce flatulence; the body being kept gently open.

The efforts of women in labour are frequently the immediate cauſe of rupture, particularly the navel rupture. Women, therefore, who are afflicted with this diſeaſe, ſhould, on the approach of the pains, and during the time of labour, have a proper perſon preſent to make a compreſſure on the navel, with a double cloth or flannel warmed. In every other ſpecies of rupture to which the female is liable in common with man, the treatment is ſimilar.

Manner of Applying Bandages, *to Ruptured Infants.*

Infants are particularly liable to navel ruptures; and therefore it cannot be ſo ſtrongly impreſſed on the minds of thoſe mothers or nurſes who have the care of children, never to undreſs and waſh them without examining the ſtate of the private parts and navel.

If a ſwelling about the navel be obſerved, a roller, called the belly roller, ſhould be made a little tighter than uſual, and if the ſwelling continue, it would be adviſeable to get proper aſſiſtance without delay. In this caſe, a piece of ſheet lead, large enough to cover the ſwelling, folded in a linen rag, and kept conſtantly on the part, will frequently reduce it in a ſhort time. Or, inſtead of this, a pyramidical compreſs of round pieces of ſticking plaſter ſpread on thin leather, with bits of card placed between them, or what is ſtill eaſier, a bit of bees wax of the ſize of a ſhilling, and faſtened with a pretty tight bandage. The cold bath is alſo extremely uſeful, and will of itſelf ſometimes effect a cure.

Ruptures in the groin, when they happen to children, muſt be treated in the ſame manner as in adults.

The Watery Rupture, which is apt to appear in boys at their birth, is a diſtenſion of the purſe, ſimilar to that in adults. It may be diſtinguiſhed from the common rupture, by the tumours being tranſparent, without pain, and not retiring on preſſure, nor being increaſed by the child crying. This is attended with no danger whatever, and the water may be removed without inconvenience, by puncturing the bottom of the tumor with a lancet.

FALLING DOWN OF THE FUNDAMENT.

This melancholy diſorder, ſo frequent with the indigent and induſtrious claſſes, conſiſts in a protruſion of the rectum, ariſing from a debility of the ſurrounding muſcle and the adjacent parts, which ſerve to ſupport that inteſtine, and keep it in its ſituation. It may be occaſioned by violent ſtraining at ſtool, by the natural efforts of perſons troubled with coſtiveneſs, by

worms, by an indiſcriminate uſe of aloetic pills or other purges, and in infants by exceſſive crying.

To reduce or replace the protruded inteſtine, when it forms a thick cuſhion round the anus, the patient ought to be placed on the ſide of the bed, lying on his face, with his feet on the ground. The buttocks being elevated, ſhould be preſſed againſt each other, and by making gentle ſemicircular motions from right to left, and from left to right, on the middle of the protruding part of the inteſtine, it generally re-enters very eaſily.

Should this means not be ſufficient, the higher part of the gut muſt be preſſed upwards, by introducing the fingers of one hand, previouſly oiled, while the palm of the other ſupports its lower extremity.

Bleeding from the arm, and applying leeches to the inflamed part, will be of eſſential ſervice. It is alſo recommended to ſit over the ſteam of hot water, or rather a decoction of poppy heads and camomile flowers, ſomenting alſo the parts with the ſame, and afterwards waſh them with a ſolution of ſugar of lead, made of fifteen grains of ſugar of lead and one pint of water. Bathe the deſcended inteſtine with this mixture, made moderately warm, and keep conſtantly applied compreſſes of linen wetted with it, of a ſufficient thickneſs to retain the moiſture.

After the inflammation has ſubſided, the inteſtine may be returned with eaſe and ſafety, but it is often difficult to retain it in its ſituation, from the debility of the muſcle. This can only be effected by a ſuitable bandage. If the inteſtine, relieved from this bandage, ſhould fall down on going to ſtool, the perſon himſelf can eaſily return it, by preſſing two fingers on each ſide of the anus, in order to puſh the inteſtine upwards, in proportion as the excrement is diſcharged. A clyſter of half a pint of milk, one ounce of brown ſugar, and one ounce of olive oil, ſhould be injected every morning to facilitate the evacuation; and, in voiding, an almoſt upright poiſture ſhould be obſerved.

As debility is the prominent cauſe of this diſeaſe, a copious uſe is recommended of tonic and aſtringent

medicines, and injection, of decoctions of bark, galls, and other vegetable aſtringents. The diet ſhould conſiſt of ſolid food, roaſted or baked, and avoiding all fat, oily, or flatulent ſubſtances. A few glaſſes of red port will aſſiſt in promoting the tone of the ſyſtem.

CHAP. LX.

OF MEDICAL ELECTRICITY.

HAVING in the courſe of this work recommended electricity in various caſes, we ſhall devote a ſhort ſpace for the general conſideration of this remedy, which deſerves, much more than it is, to be employed in practice, being in general, a ſafe application, and from its incredible force, moſt potent in its effects on the human frame; and having been ſucceſsful in numerous caſes of different natures, where the diſeaſes had reſiſted the power of medicine. In ſhort, it is a bold experiment, which may be ſafely tried, but only by a ſkilful hand, for its power, as we ſee in lightning, is capable of extinguiſhing life at a ſtroke, while with diſcretion it may be paſſed through the tender fabric of the brain.

The application of the electric fluid to diſeaſes of the human body, may be divided into three heads; firſt, under the form or radii on ſparks, when projected from a point; ſecondly, under the form of a ſtar, when a number of theſe radii are concentred on a braſs ball; and thirdly, under the form of a globe, when the radii are condenſed in a Leyden jar. To each of theſe belongs a ſpecific virtue. The firſt, or radiated ſtate, acts as a ſedative; the ſecond, or concentrated ſtate, as a deobſtruent.

In local complaints, its power alone will in many caſes be ſufficient; in conſtitutional diſeaſes, it is a concomitant of medicine.

The apparatus, in the ſimple form to which it is now reduced, conſiſts of a cylinder, a conductor, and a Leyden jar, with an inſulated chair, an electrometer, a glaſs mounted director, with a wooden handle, to the extremity of which a braſs ball, or wooden point, is fitted, and a braſs director mounted in wood.

When the fluid is to be applied, the operator connects by a ſmooth wire, the glaſs mounted director to the conductor with a point at its extremity, and the radii are projected thence to the part affected. When deſirous of propelling the ſparks he changes the point for the ball. When the ſhock is intended, the circuit of the Leyden jar muſt be made. The perſon inſulated may be ſubjected to a double intention at one moment. Suppoſe a pain in the eye requires a ſedative application to the affected part, and the ſtimulus of a bliſter at a remote place, the fluid may be thrown from the wooden point on the eye, and at the ſame inſtant ſtimulating ſparks may be drawn by the braſs ball applied to the ſeat of the diſeaſe alone.

The following are a few of the diſeaſes in which the electric fluid has been applied with ſucceſs:

In its radiated ſtate—eruptions of the ſkin; contraction of the muſcles; loſs of the uſe of limbs from cold; abſceſſes; ſwellings; tumours after the ſmall-pox; conſtipation of the bowels.—In its concentred ſtate—ague and paralytic affections.—In the form of a ſhock—locked jaw; acute pain of the head; ſprains; ſprain and ſwelling of the joints; ſchirrus of the teſtes; ſuſpenſion of the procreative powers; hypochondria or melancholy, and palſy in the urinary bladder.

CHAP. LXI.

OF CHILD-BIRTH.

IN a former part of this work (p. 487) we promiſed to give ſuch inſtructions reſpecting child birth, as might be requiſite to enable matrons and nurſes to give

assistance in deliveries in cases where immediate professional obstetric aid may not be at hand. This necessary information will form the present chapter, in which we shall communicate such plain advice, as may not only be useful at this crisis, but will give to unexperienced pregnant women such a knowledge of their situation, as may tend to prevent those evils which ignorance and apprehension too frequently produce.

It may be necessary to premise that the process of childbearing is by no means attended with that difficulty and danger which interested practitioners have industriously held forth. In ninety-nine cases out of a hundred, Nature does the work herself, or at least requires very little assistance, and that there is seldom danger, except from injudicious management and improper interference.

Were women properly instructed in the obstetric art, in every point of view they are much better calculated than men to assist Nature in deliveries. Besides the indelicacy and immoral consequences, which too often attend the employment of men midwives in this natural occupation of the other sex, females are altogether much better qualified than males. They are more tender, careful, and observant, and to them the patient can more freely disclose her situation. The employment of men is of modern introduction, copied from the manners of the French, where women pay little regard to that delicacy for which the British females are deservedly admired; and it may be asserted without fear of refutation, that in former times, women were as safely delivered as now, when the male practice has become so universal. In fact, it is no harsh assertion, that their interference has been of the worst consequences. Their constant use of instruments, which are not requisite once in a thousand times, has occasioned in innumerable instances the death both of mother and child, or maiming them in such a manner as to produce incurable maladies during the rest of their lives; of this some very recent instances in high-

life could eaſily be given. We, therefore, moſt ſincerely hope, that by the regular inſtruction of women as midwives, the male practice may be done away, except in caſes where ſurgical aid is neceſſary *.

After this neceſſary preface, we proceed to practical inſtruction.

When the labour approaches or comes on ſuddenly and a proper midwife is not at hand, it will be proper to procure the aſſiſtance of one or more experienced matrons in the neighbourhood, and in the mean time the patient ſhould be kept as quiet and free from apprehenſion as poſſible.

Labour may be divided into three ſtages. The firſt conſiſts in opening the mouth of the womb, and of the bag which contains the child;—the ſecond compriſes the actual paſſage of the child, and its ſeparation from the mother; and the third is the romoval of the afterbirth, &c. The firſt ſtage laſts from three to ten hours, and ſometimes it extends to fourteen or fifteen.

In the beginning of labour, any interference of the midwife or other attendant, unleſs there be ſome unuſual reſiſtance, or the waters come too early, can never be of uſe, and may often prove injurious.

The dreſs of the woman ſhould be as light, uncumberſome, and eaſy as poſſible. There ſhould be ready a pot of hog's lard, with which the inſide of the paſſage of the womb is to be rubbed. Thread for the navel ſtring, and a number of ſoft cloths, well aired, ſhould alſo be at hand.

When the firſt ſtage is nearly completed, the woman ſhould be put to bed, laid on her left ſide, and her face to the back of the bed, with a pillow doubled, and placed between her knees. There ſhould be a free

* In this respect we have a very flattering hope in the recent establishment of *THE BRITISH LADIES' INSTITUTION, for the Encouragment and Instruction of Female Midwives, and the Delivery of Pregnant Women at their own Houses, gratis;* an establishment patronised by her royal highness the princess of Wales, the prince of Wales, and several other branches of the royal family, with a numerous list of the most distinguished characters among the nobility and persons of high rank.

circulation of air, but the patient muſt not be placed in a current. A blanket doubled thick and wrapped in a ſheet ſhould be laid under her, and removed after delivery.

When the firſt ſtage is pretty far advanced, the pains generally return with great regularity every three or four minutes.

Women ſhould not be impatient in the firſt ſtage of labour. The more ſlowly it goes on at that time, the more certain will be the chance of a ſpeedy delivery.

When the bag burſts, and the waters are diſcharged, the parts ſhould be anointed with hog's lard.

In common deliveries the head firſt protrudes, the largeſt part of it being applied to the wideſt part of the baſon; but in its paſſage the portion is altered by the mere contraction of the womb.

After the waters are diſcharged, there is ſometimes a bearing down pain, which continues till delivery. In other inſtances, the pains return at longer or ſhorter intervals, and gradually increaſe.

By means of the contractions of the womb, the ſubſtance which had ſealed it up is diſcharged; it is a ſlimy matter, frequently tinged with blood, called the *ſhews*.

By degrees the pains increaſe, and come on at regular intervals of about ten minutes.

There are alſo falſe pains, which generally occur in the evening or night; they may be known by neither being ſo regular nor ſo violent as the true pains; and better as not occaſioning a change of the orifice of the womb, and bringing down the ſhews.

Falſe pains are occaſioned either by the womb preſſing on the ſurrounding parts, or by coſtiveneſs. In the former caſe, change of poſition and opiates will give eaſe; in the latter the coſtiveneſs muſt be removed, which will be beſt done by clyſters.

The bearing down pains which force the child through the paſſage, ſhould in all caſes be the abſolute work of Nature, and neither the woman

herſelf, nor her attendants, ſhould attempt to aſſiſt.

When the head has paſſed through the narrow paſſage, the mother experiences ſome relief from the violence of the pain. This interval ſhould be allowed to continue for a minute or two, before any effect be made to pull out the child. Nature being the principal operator in the whole proceſs, ſhe relaxes her effort for a moment, and it will eaſily be felt when the ſtruggle returns; at which time the child ſhould be carefully, but neither by force, haſte or violence, aſſiſted in coming entirely away.

The midwife, or whoever takes charge of the delivery, ſhould be particularly careful in tying the navel ſtring, for if it be too looſe, a diſcharge of blood enſues; if too tight, there is equal danger in cutting it.

After the child has fully come into the world, the next buſineſs is to ſeparate it from the after birth, or placenta cake, to which it is attached by the navel ſtring, and then to clear the womb of all the appendages left in it. The navel ſtring muſt be ſeparated from the mother, and tied, leaving a ſmall part beyond the ligature. To this, a piece of ſcorched rag is to be applied, till it drop off.

After ſome interval beyond the labour, there occur after pains, occaſioned by the reverſed contraction of the womb, and deſignated grinding pains, but which are much leſs violent than thoſe of labour.

When theſe contractions have continued for a quarter or half an hour, the after birth, &c. is thrown off, and the womb returns to its natural ſize. When from miſmanagement, or the deſeaſed ſtate of the after birth, it does not come away at a proper time, there is conſiderable danger.

Before the after birth has come away, it is neceſſary to aſcertain if another child remain in the womb; and in the view of this, the midwife ſhould always make a

ligature above, on the navel ſtring, when ſhe ſeparates the child that is born.

A midwife can generally know from feeling attentively the ſtate of the belly, whether there be a ſecond child. If only one has been contained in the womb, it very ſoon after delivery reſumes its former ſize; when there is a ſecond child, it does not appear to leſſen; the bowels keep behind, and at the ſides, and the belly feels nearly as hard as before the child was born.

In ſome rare inſtances, the midwife cannot judge perfectly by this eaſy and delicate mode, whether one or more children be contained in the womb; in this caſe, the midwife muſt aſcertain the fact by introducing her hand, previouſly rubbing it with lard or pomatum. If this be done immediately after delivery, there is no danger, and little pain, but if too long delayed, it may be both dangerous and painful.

In aſſiſting to carry away the after birth, the midwife muſt ſtop for the contraction of the womb.

When the grinding pains are felt, the midwife ſhould aſſiſt to bring away the after birth, by gently pulling the navel ſtring during a pain, and ſo managing as to bring the after birth through the baſon, without interruption.

Where there are more than one child, the blood veſſels of the cake frequently unite; if therefore that part of the navel ſtring which is fixed to the after birth be not tied, the life of the ſecond child may be loſt.

If there be a ſecond child, ſome time ſhould be allowed the patient to reſt after delivery of the firſt.

Theſe are the principal directions to be given in ordinary labours. In lingering and croſs labours inſtructions here would be of little ſervice; as they require not only experienced midwives, but ſometimes ſcientific men. In general, we have only here to obſerve, that an officious interference by ignorant individuals, may be attended with the worſt conſequences.

Here, and indeed in all cafes, much depends on the patient being kept as compofed as poffible; any extraordinary agitation is of the worft confequences. She ought to bear with fortitude, and fubmit with refignation, to the management of the midwife, if fhe regard her own or her child's life.

CHAP. LXII.

OF DIET.

THERE is no country in the world where the people eat fo much folid animal food as in England. This, and bread, conftitutes their principal diet, without a due proportion of vegetables. This mode of life is not only expenfive in itfelf, but excites thirft, and leads to an immoderate ufe of ftrong beer, and other ftimulating liquor, which keeps the lower orders in indigence. To indulge this propenfity, they facrifice every thing, and particularly their health.

The following pages are written with a view of teaching the common people a cheaper, more healthful, and more nutritious regimen, in regard to diet, which we truft may not be altogether unattended to, at the time when every thing has rifen to an enormous price, and in a country whofe riches in a great meafure depend on the cheapnefs of labour.

We are well aware of the difficulty of overcoming rooted habits, and have but little expectation of inducing the adult to alter their mode of life; but if we can prevail on them by reafon, to train up their children in a better regimen, a reform in this part will gradually enfue, and a total change may in time take place in the people's manner of living—a change that would be falutary in every refpect, and would render the people lefs dependent on animal food and bread

for their ſubſiſtence, thus arming them againſt the hardſhips occaſioned by a ſcarcity or dearth of either of theſe articles in future.

No animal eats ſuch a variety of food as man. Fitted by Nature for an inhabitant of every clime, he devours them all, and in a civiliſed ſtate, his table is ſupplied from all the quarters of the world. To ſuit his palate, and to correct the improper qualities of meats in their natural ſtate, he calls in the aid of cookery, and extends it to all degrees of luxury.

Man's frame and ſtructure mark him as intended by Nature to uſe both animal and vegetable food: to apportion them properly is a moſt important point, and for which no univerſal rule can be laid down; much depends on the perſon's conſtitution, ſituation in life, and other circumſtances. The moſt general recommendation that can be given, but for which there are many exceptions, is to uſe of vegetables double the quantity eaten of animal food.

Animal food is certainly more nutritious than vegetable. The uſe, however, of it alone, or nearly ſo, is extremely injurious. It acts as too great a ſtimulus of the ſyſtem, accelerates too much the circulation of the blood, excites nauſea and thirſt, occaſions putreſcence in the ſtomach and bowels, and brings on violent griping pains, cholera and dyſentery. The laborious may, and perhaps ought to, uſe a conſiderable proportion of animal food, their purſuits require it; but the ſedentary, the plethoric, and above all, the ſtudious, ought to live chiefly on vegetables, and to abſtain from the free uſe of ſtrong liquors.

To the great uſe of animal food, we may aſcribe the frequency of conſumptions in England, and a variety of other diſorders, particularly ſcurvy, which few families eſcape, and which it is univerſally known is only to be corrected by a copious uſe of vegetables.

But the body is not affected alone by this diet. It alſo greatly influences the mind. It blunts the

imagination, and induces a ferociouſneſs unknown to men whoſe food is chiefly taken from the vegetable kingdom.

A moderate uſe of animal food is doubtleſs to be recommended; the mode of uſing it, however, deſerves conſideration. The people of England are too fond of ſolids; a pound of meat is merely a pound of meat, which a hearty man can eat for his dinner; whereas, the ſame quantity ſtewed down with proper vegetables, will furniſh an ample and nouriſhing meal for half a dozen of perſons. To inculcate, therefore, among our countrymen the great advantage they would receive from this mode of cookery, is the great object of this part of the work. It is a ſubject which of late years has beneficially occupied public attention, and many uſeful receipts have been publiſhed for making cheap, nouriſhing, and wholeſome diſhes for the poor, conſiſting of broths, ſoups, ſtews, and pottage, and calculated to afford a hearty and plentiful meal, without either bread or drink. Count Rumford has, of all others, paid moſt attention to this improvement in cookery for the poor, and in his Economical and Philoſophical Eſſays, given a variety of forms well adapted for the purpoſe, but which, we fear, have in general been too little attended to. The ſoup ſhops eſtabliſhed ſome years ago, in a time of great dearth, were formed on a good principle, and were on the whole a uſeful ſpecies of charity. They were not, however, without objections, and one great diſadvantage of them was, that they raiſed to an extraordinary price thoſe coarſer parts of the meat, which the poor and economical were formerly wont to purchaſe for ſoups, but which were now become out of the reach of thoſe above receiving charity.

In Scotland, for time immemorial, the common people have been in habit of living in the manner now recommended. Their breakfaſt and ſupper is haſty pudding or oatmeal, eaten with milk, and their dinner, broth, with variety of vegetables and meat; often with-

out meat, or what the French call *ſoup maigre*. They thus require no bread for breakfaſt or ſupper, and little dinner; and the Scotch peaſants rarely taſte any other liquor than water; yet no perſons are more healthy, cheerful, or active, nor retain their ſtrength to a longer period of life, while their external appearance denotes comfort and reſpectability The Engliſh labourer, on the other hand, who is burnt up with broiled ſalt meat, or dry bread and cheeſe, has a continual thirſt, and ſpends moſt of his earnings in liquor. This food, by acting as a powerful ſtimulant, may make him do more work for ſome time, but he ſeldom lives long, and is an old man when he ſhould be in his prime. Meanwhile his expences for food and drink preclude him from a decent and proper attention to dreſs, and he is too often ſeen dirty and in rags, while he is earning from one to three pounds a-week.

Roaſting or broiling meat are moſt waſteful modes of cookery, which ſhould be avoided by the poorer claſs, as much of the ſubſtance, and the moſt nutritious parts, are loſt by ſcorching, and fly off by evaporation. But what ſhall we ſay to the extravagance of the many thouſands, even of the poor, who throw into the kennel the liquor or ſoup of the meat which they boil? Surely, in theſe hard and expenſive times, if perſons will not take the benefit themſelves of this eſſence of the meat, they might at leaſt give it to the poorer part, who would from ſuch refuſe, boiled up with vegetables, make many a hearty meal.

To thoſe accuſtomed to broth, it is not only healthy, but particularly agreeable to the palate. The natives of North Britain, who come into England, feel a very ſenſible want of their early food, and greedily devour a meſs of barley broth or herb ſoup, when accident throws in their way this their rational luxury. In all the nations of the continent, broths, ſoups, and ſtews, form the principal modes of cookery. In England alone, the general maſs of the

people live on ſolid butcher's meat, bread, cheeſe, butter, and ale or porter. An alteration in this reſpect, cannot, we repeat, be expected in perſons grown to manhood. Every change of diet, to be introduced with effect, muſt begin with children. Whatever we are accuſtomed to eat when young, we generally prefer during life. Were the children of this country taught to eat haſty pudding and milk for breakfaſt and ſupper, and broth with vegetables and meat boiled in it for dinner, they would reliſh theſe diſhes as long as they lived, would find little occaſion for bread, and leſs for drink; they would thrive better than on their preſent diet, and their morality would be improved by temperance and ſobriety. At preſent the father, fond of ſtrong beer, makes his ſon from infancy guzzle it at every meal, while the mother does not fail to give her little favourite tea, as often as ſhe indulges in that debilitating beverage. Thus the ſon becomes a tippler, and the daughter ſippers tea, inſtead of taking ſolid food; is eaten up with vapours and nervous diſorders.

It has been ſaid that the poor cannot afford time or fuel to make ſoups. Yet they find means to afford both to boil a kettle and make tea. A much ſmaller fire, with ſcarcely any attendance, would make a comfortable ſoup or ſtew. The Engliſh boaſt of their good living, while there is no nation in Europe which ſo little underſtands the culinary art, or dreſſes to ſo little advantage either to the palate or pocket the excellent animal food and eſculent vegetables with which the country abounds.

Bread, or what the Weſt Indians term bread-kind; that is, any farinaceous ſubſtitute for bread, forms a conſiderable part of the diet of all nations. Moſt people, however, in this country, eat more bread than is conducive to health. A due proportion of it is wholeſome, but exceſs in this, as in any thing elſe, is injurious. A ſurfeit of bread is of all others the worſt. The French conſume a vaſt quantity of bread, but its

nd effects are corrected by their copious uſe of ſoups nd fruit.

One great uſe of bread is to form a maſs adapted to fill up the alimentary canal, and carry the nutritious uices through that paſſage, in ſuch a ſtate as to render them fit to be acted on by the lacteal abſorbents, which take up the nouriſhment and convey it to the blood. Hence bread may be conſidered the ſoil from which the nutriment is drawn. Conſidering it in this light, the fineſt bread, though certainly moſt nutritious in itſelf, is by no means the beſt adapted to diſtend the alimentary canal, and to blend with the more ſubſtantial articles of the diet. It is nutritive in itſelf, but its chief purpoſe is what we have juſt mentioned.

Bread is the moſt expenſive mode of uſing grain, eſpecially as it is charged with two heavy additional charges in paſſing through the hands of miller and baker. The former frequently grinds down with the wheat extraneous and improper matter, while the latter bakes up with it, lime, chalk, alum, and other deleterious ingredients.

Fine flour too much approaches to ſtarch, an article fa too aſtringent and viſcid for this branch of food.

Houſhold bread, made by grinding down the whole grain, and ſeparating from it only the coarſer bran, is doubtleſs the moſt wholeſome, and even moſt palatable, though it may not ſo greatly pleaſe the eye; indeed a mixture of wheat with other grain, particularly with rye, will be found after a little uſe, both moſt palatable and conducive to health. Mixtures of wheat with potatoes, rice, and other farinaceous ſubſtances, which the late high prices conſiderably introduced, is much preferable to bread made of fine flour, which is ſo much a favourite, eſpecially among the lower orders. For the more laborious, peaſe, beans, oats, and maize or Indian corn, form a proper mixture either with wheat or rye. Oats alone, which are uſed for bread in a great part of Scotland and ſome part of Ireland, make a healthful bread. Barley-bread paſſes too quick-

ly through the alimentary canal; but bread of barley and peaſe-meal is very nouriſhing. Of peaſe alone it is both hard and indigeſtible, and ſtill more ſo of beans.

Much of the bread in this country is conſumed by children. It is always ready, and when the child cries for food, a piece of bread is put into his hand. As a corrector of other food, it is, as we have already ſaid, beneficial, but here too much of it is particularly improper. Children are apt to be troubled with acidities in the firſt paſſages; and it is well known that bread mixed with water, and kept in a degree of heat equal to that of the human ſtomach, will ſoon turn ſour.

Tea may here properly be introduced and conſidered, as with it there is by far the greateſt conſumption of bread. This beverage is of very late introduction, almoſt within the memory of aged perſons of the preſent day, but now become univerſal in this country. The inhabitants of Great Britain conſume a greater quantity of this herb than all other nations of Europe. The loweſt Engliſhwoman muſt have her tea for herſelf and family; and as it contains no nouriſhment, it muſt of courſe be accompanied with bread and butter. The quartern loaf goes little way among a family of children, and if we add the coſt of tea, ſugar, butter and milk, the expence of one meal might fill their bellies with wholeſome and nutritious food three times a-day. Tea among the higher claſſes is a luxury; among the lower it is an article of diet. Many women in particular in humble life, make it and its accompaniments, almoſt their ſole food.

This immoderate uſe of tea has already, in a great meaſure, effected a general change of conſtitution in the people in this country. Debility, and a conſtant irritability of fibre, have become common not only in women, but in men. It has been the principal promoter of nervous diſorders; has nearly made a conqueſt of one ſex, and is making rapid ſtrides towards vanquiſhing the other.

Were women aware of the train of diſeaſes induced

by debility, did they conſider how diſagreeable theſe diſeaſes make them to the male ſex, they would avoid an exceſs in tea as a moſt pernicious poiſon.

To the heavy, ſluggiſh, or plethoric habit, it may be ſerviceable, nor is it to be condemned as an article of luxury after a full meal, or in a crowded aſſembly; but as an article of diet it is fraught with the moſt pernicious conſequences.

Boiled grain.—Bread is the readieſt and moſt portable mode of uſing grain; other forms, however, are no leſs agreeable, and ſome of them more wholeſome. Simple boiling is of all others the beſt, and does not, like bread, produce either the acidity or viſcidity; it beſides, precludes all adulteration, and is a preparation much leſs laborious and artificial than baking.

A greater proportion of mankind uſe boiled rice than they do bread; and ſeveral other ſorts of grain, particularly barley and oats, boiled in the ſame manner, make good ſubſtitutes for bread. Peaſe, likewiſe, made in the form of a pudding, are a hearty ſubſtitute, of which moſt perſons are fond, and many prefer to bread. Both peaſe and beans boiled in ſoup are nouriſhing, as well as palatable, and require not the addition of bread. They are of all grain the moſt hearty; of this there is a good proof in labourers, who after having been much fed on this legume, remove to farms where they uſe other ſpecies of grain, and who ſoon complain of a diminution of ſtrength, and long for their peaſe meal.

Boiled barley, eaten with milk, butter, or molaſſes, is conſidered a luxury in Holland; it is the principal food of the Dutch ſailors, who are both healthy and robuſt. Barley is, perhaps, the beſt lithing ingredient for broth, and grits, or coarſe oatmeal, is little inferior.

Oatmeal is frequently made into bread, but its beſt form is haſty pudding, eaten with milk, as we have already mentioned. It is a general, but a very erroneous idea, that it is heating and inductive of cutaneous diſeaſes. Theſe proceed more from the want of cleanlineſs than from any particular aliment. The frequency of theſe complaints with which Scotland is derided,

and which are attributed to the uſe of oatmeal, is ſo far unfounded, that they are much more common among the lower orders in London, than in any part of North Britain. If oatmeal were heating, it would hardly be recommended as forming in gruel one of the moſt diluting and cooling beverages.

A late learned lexicographer ſarcaſtically defined oats to be in England the food of horſes, and in Scotland the food of men. Were the horſes in England to eat leſs of it, and the men more, it would be of conſiderable advantage, and tend greatly to leſſen the expence of living. The Scotch it is to be hoped, will neither be reaſoned nor laughed out of the uſe of this wholeſome article of diet.

Indian corn is a very hearty ſubſtitute for bread, and is beſt plain boiled, or formed into puddings or dumplings. The negroes in America prefer it to rice, and the Bavarian peaſants to flour; it is highly nutritious, and the cheapeſt food known.

Buck wheat boiled is of a very mucilaginous nature, and conſequently nouriſhing. It conſtitutes a principal part of the food of the common people in ſeveral countries, particularly Ruſſia.

Butter, though a good article of diet, is uſed much too freely in England. Like all other oleaginous ſubſtances, it has a diſpoſition to rancidity, which is greatly accelerated by the heat of the ſtomach, and often produces an uncomfortable riſing in the ſtomach, proceeding from the difficulty of its oily quality mixing with watery fluids. Like other oils, it relaxes the ſtomach and impedes the action of digeſtion; hence the cuſtom of giving rich broths and fat meats to perſons of a voracious appetite. Bread and butter conſtitutes a great part of the food of children, which without doubt occaſions in a great degree the humours with which they are troubled. We hear women often complain of indigeſtion. Is this to be wondered at when we conſider the ſedentary lives they lead, and the quantities of muffins, crumpets, and other ſpongy breads they devour twice a day, ſoaked in liquid butter; when we ſee the loads of paſtry, the moſt indigeſtible of all

forms of butter, which they greedily conſume? With ſome vegetables, and with the leaner ſort of fiſh, butter is properly uſed; but to uſe it with fat meat, or with ſuch heavy fiſh as ſalmon and herrings, muſt be extremely prejudicial, except in ſtrong athletic perſons employed in hard labour.

Cheeſe eaten in ſmall quantities after meals is ſerviceable, but as a diet nothing can be worſe. It is extremely indigeſtible, occaſions conſtipation, fires the blood, and excites a conſtant craving for drink, and while it loads the ſtomach, imparts little or no nouriſhment. At the ſame time it is one of the moſt expenſive articles of food that can be uſed. Many of the working people in London expend a third more in bread and cheeſe and porter, than would procure them palatable and nutritious diſhes *.

Roots and *Fruits* form a large claſs of the ſubſtitutes for bread. In warm climates theſe in general preclude the uſe of bread altogether. The inhabitants of South America uſe the plantain, banana, and yam, either boiled or roaſted, almoſt excluſively. In like manner, the natives of the South Sea iſlands uſe the bread fruit, now introduced into our Weſt India colonies.

Potatoes in this country form the principal ſubſtitute for bread. Still however they are not cultivated and uſed to the extent they ought to be. In Ireland, and a great part of Scotland, they are a principal article of diet; they are not ſo hearty a food as corn, but no man

* A labouring man will be very poorly fed with half a pound of cheese in the day; this costs 5 *d.*

Bread	—	—	—	4
Porter	—	—	—	10
				1*s.* 7*d.*

Whereas he would be amply satisfied with a soup or stew made of half a pound of beef, costing 4

Vegetables	—	—	—	2
Bread	—	—	—	2
Porter	—	—	—	5
				1*s.* 1*d.*

will periſh for hunger who has potatoes. As they thrive on every ſoil, and are leſs liable than grain to ſuffer from the inclemency of the ſeaſon, we muſt blame ourſelves if we ſuffer a famine to exiſt. Indeed, no ſuch thing can ever happen if due attention be paid to the culture of this valuable root. A far greater quantity of farinaceous food can be raiſed on an acre of ground, than if ſown with any ſort of corn. Some of the ſtouteſt men are brought up on milk and potatoes, and Dr. Pearſon, who has beſtowed much pains in analyſing this root, ſays, that potatoes and water alone, with common ſalt, will be complete nutriment. To render them a good ſubſtitute for bread, nothing more is required than ſimple boiling or roaſting; but when intended to ſerve as a meal, they require the addition of milk, butter, or gravy. Stewed mutton and potatoes, known by the name of Iriſh ſtew, is a cheap, nouriſhing, and palatable diſh. The exceſs of fat in the mutton, which would be otherwiſe loſt, is advantageouſly abſorbed in the potatoes. It is, however, to be obſerved, when potatoes are uſed in ſtews or broths, they ought previouſly to be boiled, and the water thrown away, as it contains ſomething deleterious. Indeed botaniſts have claſſed this as a ſpecies of nightſhade, which it is well-known is an active poiſon.

After the potatoe, the *Jeruſalem artichoke* deſerves to be mentioned, not only as being ſomewhat of the ſame nature, but is ſtill more productive, and eaſily raiſed; yet it is a root hardly known by the generality of people, ſo little has it been cultivated. The plant grows ſix or ſeven feet high, and has a number of roots attached to it like potatoes. Their taſte being ſomewhat ſimilar to artichoke bottoms, it has been called an artichoke, but why it has obtained the epithet of Jeruſalem is not ſo evident, as it is a native of Brazil.

The *parſnip* is reckoned one of the moſt nouriſhing of our eſculent roots, as containing the greateſt quantity of ſaccharine matter, and being at the ſame time of eaſy digeſtion.

Carrots are ſomething of the ſame nature as parſnips, but more ſolid and harder of digeſtion. When properly cultivated, they grow large, ſucculent, and palatable, particularly in ſoups and ſtews. The culture of this root much deſerves attention. The farmer would find it extremely profitable, as well as a uſeful crop, to alternate with grain, and it is well known to be an excellent food for horſes. Much of the oats they conſume might be ſaved by this much leſs expenſive ſubſtitute. It is alſo an admirable food for cows, and greatly enriches their milk.

The *turnip* poſſeſſes little or no ſaccharine matter, and is therefore not ſo nutritive as ſeveral other roots. It is however wholeſome and emulcent when properly cultivated, and forms the principal article of food for cattle in the winter.

Salſafy, *ſkirrets*, and ſeveral ſorts of *beets*, particularly that called the *root of ſcarcity*, are pleaſant, nutritious and digeſtible.

Cabbage, and other ſorts of *kale*, including *cauliflowers* and *brocoli*, are all likewiſe uſeful and wholeſome vegetables, although rather inclined to create flatulency, but which is completely corrected by a proper accompaniment of meat.

Onions have long been conſidered a moſt valuable vegetable. In Egypt, they were a favourite article of food four thouſand years ago. They are in that country more ſweet and leſs pungent than here. The onions of Portugal have a ſimilar quality. They are beſt dreſſed ſimply boiled, and are thus rendered mild, of eaſy digeſtion, and go off without leaving any diſagreeable heat on the ſtomach and bowels. They alſo form a ſavoury addition in ſoups, as do likewiſe their pungent ſpecies *ſhallots* and *garlick*. The ſtrong ſmell theſe roots communicate to the breath may be remedied by eating a few parſley leaves immediately after. The *leek* is ſomewhat ſimilar to the onion, only that the ſtalk may be uſed as a pot herb as well as the root. Indeed it is one of the beſt, moſt ſavoury, and whole-

ſome of herbs. The Welſh are fond of it to enthuſiaſm, and the Scotch make an admirable diſh, by ſtewing an old cock, a piece of corned beef, or both, with plenty of leeks.

There are many other roots and plants valuable for culinary purpoſes; what we have mentioned, however, are the principal. It may be proper to obſerve, that were they better boiled than they generally are in this country, it would extract a conſiderable quantity of the air contained in them, and thus diminiſh their flatulence.

CONCLUSION.

Much as we may recommend the culture and uſe of farinaceous, and other roots and vegetables, as ſubſtitutes for bread, we by no means wiſh to diſcourage the cultivation of grain. On the contrary, we conſider the cultivare of grain as the culture of man. While the husbandman raiſes food for his fellow creatures, he is laying the foundation of health and longevity to himſelf and his offspring. While the manufacturer or artificer is ſitting in an awkward poſture, breathing confined air, the ploughman riſes with the ſun, eats his wholeſome meal of milk and farinaceous vegetables, hies him to the field, where he ſpends the day in uſeful labour, inhales the ſalubrious breezes, and at even retires with a contented mind, and a keen appetite, to enjoy his ſimple repaſt and ſound repoſe.

No manufacture enriches a nation ſo much as the culture of grain, and when the almoſt incredible ſums are conſidered, which this country pays for the importation of grain, its culture cannot be too much inculcated. Were the waſte lands brought into cultivation, the advantage would be incalculable. Look at ſome countries abroad, particularly Mecklenburgh; by its attention to agriculture, and its vaſt exports to this country, it is become now like a garden; its proprietors are rich and its farmers happy.

Britain, if proper encouragement were given to agriculture, could not only ſupply herſelf, but have a

ſurplus of grain for exportation. This would contribute more to the real wealth, the happineſs of her people, and the ſtability of government, than either the increaſe of her trade, the flouriſhing of her manufactures, and the extenſion of her territory.

APPENDIX:

CONTAINING

A Liſt of Simples and of ſuch Medicinal Preparations as ought to be kept in Readineſs for private Practice.

The Method of preparing and compounding ſuch Medicines as are recommended in a former part of the Book, with the Addition of ſeveral others of a ſimilar Nature.

Remarks on the Doſes, Uſes, and Manner of applying the different Preparations.

Liſt of the Medicines commonly used in Practice, with their proper Doses.

Medicamentorum varietas ignorantiæ filia est.
BACON.

INTRODUCTION

TO THE

APPENDIX.

IGNORANCE and ſuperſtition have attributed extraordinary medical virtues to almoſt every production of nature. That ſuch virtues were often imaginary, time and experience have ſufficiently ſhewn. Phyſicians, however, from a veneration for antiquity, ſtill retain in their liſts of medicine many things which owe their reputation entirely to the ſuperſtition and credulity of our anceſtors.

The inſtruments of medicine will always be multiplied, in proportion to men's ignorance of the nature and cauſe of diſeaſes; when theſe are ſufficiently underſtood, the method of cure will be ſimple and obvious.

Ignorance of the real nature and permanent properties of theſe ſubſtances employed in the cure of diſeaſes, is another reaſon why they have been ſo greatly multiplied. Phyſicians thought they could effect by a number of ingredients, what could not be done by any one of them. Hence aroſe thoſe amazing farragos which have ſo long diſgraced the medical art, and which were eſteemed powerful in proportion to the number of ſimples that entered their compoſition.

The great variety of forms into which almoſt every article of medicine has been manufactured, affords another proof of the imperfection of the medical art. A drug which is perhaps moſt efficacious in the ſimpleſt form in which it can be adminiſtered, has been nevertheleſs ſerved up in ſo many different ſhapes, that one would be induced to think the whole art of phyſic lay in exhibiting medicine under as many different modes as poſſible.

Different forms of medicine, no doubt, have their uſe; but they ought never to be wantonly increaſed. They are by no means ſo neceſſary as is generally imagined. A few grains of powdered rhubarb, jalap, or ipecacuanha, will actually perform all that can be done by the different preparations of theſe roots, and may alſo be exhibited in as ſafe and agreeable a manner. The ſame obſervation holds with regard to the Peruvian bark, and many other ſimples, of which the preparations are very numerous.

Multiplying the ingredients of a medicine, not only renders it more expenſive, but alſo leſs certain, both in its doſe and operation. Nor is this all. The compound, when kept, is apt to ſpoil, or acquire qualities of a different nature. When a medicine is rendered more ſafe, efficacious, or agreeable, by the addition of another, they ought, no doubt, to be joined; in all other caſes, they are better kept aſunder. The combination of medicines embarraſſes the phyſician, and retards the progreſs of medical knowledge. It is impoſſible to aſcertain the preciſe effect of any one medicine, as long as it is combined with others, either of a ſimilar or diſſimilar nature.

In the exhibition of medicine, regard ſhould not only be had to ſimplicity, but likewiſe to elegance. Patients ſeldom reap much benefit from things that are highly diſagreeable to their ſenſes. To taſte or ſmell like a drug this become a proverb; and to ſay truth, there is too much ground for it. Indeed no art can take away the diſagreeable taſte and flavour of ſome drugs, without entirely deſtroying their efficacy; it is poſſible, however, to render many medicines leſs diſguſtful, and others even agreeable; an object highly deſerving the attention of all who adminiſter medicine.

The deſign of the following pages is, to exhibit ſuch a liſt of drugs and medicines as may be neceſſary for private practice. They are conſiderably more numerous indeed than thoſe recommended in the former part of the book, but are ſtill greatly within the number contained in the moſt reformed diſpenſatories. The ſame medicine is ſeldom exhibited under different forms; and where different medicines anſwer nearly the ſame intention, there is commonly no more than one of them retained. Multiplying forms of medicine for the ſame intention tends rather to bewilder than aſſiſt the young practitioner, and the experienced phyſician can never be at a loſs to vary his preſcriptions as occaſions require

The chemical and other difficult preparations are for the moſt part omitted. All of them that are uſed by any private practitioner are not worth preparing. He will buy them much cheaper than he can make them. Great care however is neceſſary to obtain them genuine. They are often adulterated, and ought never to be purchaſed unleſs from perſons of known veracity. Such of them as are in common uſe, are inſerted in the liſt of drugs and medicines. Their proper doſes, and manner of application, are mentioned in the practical part of the book, whereever they are preſcribed.

Such articles of medicine as are to be found in the houſe or garden of almoſt every peaſant, as barley, eggs, onions, &c. are likewiſe, for the moſt part, omitted. It is needleſs to ſwell a liſt of medicines with ſuch things as can be obtained whenever they are wanted, and which ſpoil by being kept.

The preparations made and ſold by diſtillers and confectioners e alſo generally left out. Theſe people, by operating upon a rger plan, generally make things better, while it is in their wer to afford them much cheaper, than they can be prepared any private hand.

The quantity ordered to every medicine is as ſmall as could ell be prepared, both to prevent unneceſſary expence, and that e medicine might not ſpoil by keeping. Almoſt every medi- ne ſuffers by being kept, and ſhould be uſed as ſoon after it has een prepared as poſſible. Even ſimple drugs are apt to ſpoil, d ſhould therefore be laid-in in ſmall quantities; they either rot, e conſumed by inſects, or evaporate ſo as to loſe their peculiar ſte or flavour, and often become quite inſignificant.

In the preparation of medicines, I have generally followed the oſt approved diſpenſatories; but have taken the liberty to differ om them wherever my own obſervations, or thoſe of other ractical writers, on whoſe judgment I could depend, ſuggeſted n improvement.

In ſeveral compoſitions, the ingredient to which the efficacy f the medicine principally depends is encreaſed, while the aux- liaries, which are generally ordered in ſuch trifling quantities as o be of no importance, are left out, or only ſuch of them retained s are neceſſary to give the medicine a proper conſiſtence, or the ike.

The colouring ingredients are likewiſe for the moſt part omit- ed. They increaſe the bulk and price of the medicines; with- ut adding any thing to its value. It would be well if they were ever uſed at all. Medicines are often adulterated for the ſake f a colour. Acrid and even poiſonous ſubſtances are, for this urpoſe, ſometimes introduced into thoſe medicines which ought to be moſt bland and emollient. Ointment of elder, for example, is often mixed with verdegriſe to give it a fine green colour which entirely fruſtrates the intention of that mild ointment. Thoſe who wiſh to obtain genuine medicines ſhould pay no re- gard to their colour.

Some regard is likewiſe paid to expence. Such ingredients as greatly increaſe the price of any compoſition, without adding conſiderably to its virtue, are generally either omitted, or ſome- what leſs expenſive ſubſtituted in their price. Medicines are by no means powerful in proportion to their place. The cheapeſt are often the beſt; beſides, they are the leaſt apt to be adulterated and are always moſt readily obtained.

With regard to the method of compounding medicines, I have generally followed that which ſeemed to be the moſt ſimple and natural, mentioning the different ſteps of the proceſs in the ſame order they ought to be taken, without paying an implicit regard to the method of other diſpenſations.

For many of the remarks concerning the preparation, &c. of medicines, I have been obliged to the author of the New Diſpenſatory. The other obſervations are either ſuch as have occurred to myſelf in practice, or have been ſuggeſted in the courſe of reading, by authors whoſe names I am not able diſtinctly to recollect.

I have followed the alphabetical order, both with regard to the ſimples and preparation. A more ſcientific method would have been agreeable to ſome perſons, but leſs uſeful to the generality of readers. The different claſſes of medicine have no great dependance on one another; and, where they have, it is hard to ſay which ſhould ſtand firſt or laſt; no doubt the ſimple preparations ought to precede the more compound. But all the advantages ariſing from this method of arrangement do not appear equal to that ſingle one, of being able, on the firſt opening of the book, to find out any article, which, by the alphabetical order, is rendered quite eaſy.

The doſe of every medicine is mentioned whenever it appeared neceſſary. When this is omitted, it is to be underſtood that the medicine may be uſed at diſcretion. The doſe mentioned is always for an adult, unleſs when the contrary is expreſſed. It is not an eaſy matter to proportion the doſes of medicine exactly to the different ages, conſtitutions, &c. of the patients; but happily for mankind, mathematical exactneſs here is by no means neceſſary.

Several attempts have been made to aſcertain the proportional doſes for the different ages and conſtitutions of patients; but, after all that can be ſaid on this ſubject, a great deal muſt be left to the judgment and ſkill of the perſon who adminiſters the medicine. The following general proportions may be obſerved; but they are by no means intended for exact rules. A patient between twenty and fourteen may take two thirds of the doſe ordered for an adult; from fourteen to nine, one-half; from nine to ſix, one third; from ſix to four, one-fourth; from four to two, one ſixth; from two to one, a tenth; and below one, a twelfth.

Diſpenſatories are uſually written in the Latin language. Even authors who write in Engliſh generally give their preſcriptions in Latin; and ſome of them ſhew ſo great an attachment to that language, as firſt to write their recipes in it, and afterwards tranſlate them; while others to compromiſe the matter, write the one half in Latin and the other in Engliſh. What peculiar charm a medical preſcription, when written in Latin, may have I ſhall not pretend to ſay; but I have ventured to make uſe of the plaineſt Engliſh I could, and hope my preſcriptions will ſucceed no worſe for it.

N. B. The Apothecaries weights, and the Engliſh wine measures, are uſed throughout the whole book, the different denominations of which will appear from the following

TABLE:

A pound contains		twelve ounces.
An ounce	- -	eight drachms.
A drachm	- -	three ſcruples.
A ſcruple	- -	twenty grains.

A gallons contains		eight pints.
A pint	- -	ſixteen ounces.
An ounce	- -	eight drachms.

A ſpoonful is the meaſure of half an ounce.

A LIST OF SIMPLES, and of ſuch MEDICAL PREPARATIONS, as ought to be kept in readineſs for private Practice.

AGARIC
Alum
Antimony, crude
cinnabar of
ſulphur of
Balſam of Capivi
of Peru
of Tolu
Bark, caſcarilla
cinnamon
Mezereon
Peruvian
Winter's, or canela alba
Borax
Calamine ſtone, levigated
Caſtor, Ruſſian
Cauſtic, common
lunar
Earth, Fuller's
Japan
Armenian bole
French ditto
Extracts of gentian
of guaiacum
of hellebore, black
of hemlock
of jalap
of liquorice
of Peruvian bark
of poppies
of wormwood
Flowers of camomile
of colt's foot
elder
roſemary
damaſk roſes
red ditto
Fruits, almond
bitter apple
caſſia fiſtularis
Curaſſo oranges
figs, dried
French prunes
Fruits, Jamaica pepper
juniper berries
nutmegs
tamarinds
Gum, aloes
ammoniac, in tears
arabic
aſafœtida
camphor
galbanum
gamboge
guaiacum
kino
myrrh
opium
Hartſhorn, calcined
ſhavings of
Herbs, leſſer centaury
peppermint
ſpearmint
penny-royal
ſavin
trefoil
uva urſi
wormwood
Lead, Litharge
white
ſugar of
Lemon-peel
Mace
Magneſia alba
Manna
Mercury, crude
calcinated
Æthiops mineral
calomel
corroſive ſublimate
red precipitate
white ditto
Muſk
Oil, eſſential, of amber
of aniſe
of cinnamon

Oil, essential, of juniper
of lemon peel
of peppermint
expressed, of almonds
of linseed
of olives, or Florence oil
of palms
of turpentine
Orange peel
Oyster shells prepared
Poppy heads
Resin, benzoin
flowers of
Burgundy pitch
dragon's blood
frankincense
liquid storax
white, or resin
scammony
Roots, birthwort
calamus aromaticus
contrayerva
garlic
gentian
ginger
hellebore, black, white
jalap
ipecacuanha
lily, white
liquorice
marshmallow
mezereon
rhubarb
sarsaparilla
seneka
squills
tormentil
turmeric
Virginian snake
wild valerian
zedoary
Saffron
Sal ammoniac, crude
volatile
Salt, Epsom
of Glauber
of hartshorn
nitre, purified, or prunel
polychrest
Rochel
Salt of tartar
Seeds, anise
carraway
cardamom
coriander
cummin
mustard
sweet fennel
wild carrot
Senna
Spanish flies
Spermaceti
Spirits, æthereal, or Æther
of hartshorn
of lavender, compound
of nitre
ditto dulcified
of sal ammoniac
of sea salt
of vinegar
of vitriol
of wine rectified
volatile aromatic
Steel, filings of
rust of, prepared of
soluble salt of
Sulphur vivum
balsam of
flowers of
Tar
Barbadoes
Tartar, cream of
emetic
soluble
vitriolated
Tin prepared
Tutty levigated
Turpentine, Venice
Verdegrise
Vitriol, green
blue
white
Wax, white
yellow
Woods, guaiacum
logwood
sassafras
saunders, red
Zinc, flowers of

MEDICINAL PREPARATIONS.

BALSAMS.

THE subject of this section is not the natural balsams, but certain compositions, which, from their being supposed to possess balsamic qualities, generally go by that name.

This class of medicines was formerly very numerous, and held in great esteem. Modern practice, however, has justly reduced it to a very narrow compass.

Anodyne Balsam.

Take of white Spanish soap, one ounce; opium, unprepared, two drachms; rectified spirit of wine, nine ounces. Digest them together in a gentle heat for three days; and strain off the liquor, and add to it three drachms of camphor.

This balsam, as its title expresses it, is intended to heal pain. It is of service in violent strains and rheumatic complaints, when not attended with inflammation. It must be rubbed with a warm hand on the part affected; or a linen rag moistened with it may be applied to the part, and renewed every third or fourth hour till the pain abates. If the opium is left out, this will be the Saponaceous Balsam.

Locatelli's Balsam.

Take of olive oil, one pint; Strasburg turpentine and yellow wax, of each half a pound; red saunders, six drachms. Melt the wax with some part of the oil over a gentle fire; then adding the remaining part of the oil of turpentine; afterwards mix in the saunders, previously reduced to a powder, and keep them stirring together till the balsam is cold.

This balsam is recommended in erosions of the intestines, the dysentery, hæmorrhages, internal bruises, and in some complaints of the breast. Outwardly it is used for healing and cleansing wounds and ulcers. The dose, when taken internally, is from two scruples to two drachms.

The Vulnerary Balsam.

Take of benzoin powdered, three ounces; balsam of Peru, two ounces; hepatic aloes, in powder, half an ounce; rectified spirit of wine, two pints. Digest them in a gentle heat for three days, and then strain the balsam.

This balsam, or rather tincture, is applied exterally to heal recent wounds and bruises. It is likewise employed internally to remove coughs, asthmas, and other complaints of the breast; it is said to ease the colic, cleanse the kidnies, and to heal internal ulcers, &c.

The does is from twenty to sixty drops.

This, though a medicine of some value, does not deserve the extravagant encomiums which have been bestowed on it. It has been celebrated under the different names of The Commander's Balsam, Persian Balsam, Balsam of Berne, Wade's Balsam, Frier's Balsam, Jesuit's Drops, Turlington's Drops.

BOLUSES.

AS boluses are intended for immediate use, volatile salts, and other ingredients improper for being kept, are admitted into their composition. They are generally composed of powders, with a proper quantity of syrup, conserve, or mucilage. The lighter powders are commonly made up with syrup, and the more ponderous, as mercury, &c. with conserve; but those of the lighter kind would be more conveniently made up with mucilage, as it increases their bulk less than the other additions, and likewise occasions the medicine to pass down more easily.

Astringent Bolus.

Take of alum, in powder, fifteen grains; gum kino, five grains; syrup, a sufficient quantity to make a bolus.

In an excessive flow of the menses, and other violent discharges of blood, proceeding from relaxation, this bolus may be given every four or five hours, till the discharge abates.

Diaphoretic Bolus.

Take of gum guiacum in powder, ten grains; flowers of sulphur and cream of tartar, of each one scruple; simple syrup, a sufficient quantity.

In rheumatic complaints, and disorders of the skin, this bolus may be taken twice a-day. It will also be of service in the inflammatory quinsey.

Mercurial Bolus.

Take of calomel, six grains; conserve of roses, half a drachm. Make a bolus.

Where mercury is necessary, this bolus may be taken twice or thrice a-week. It may be taken over night; and if it does not operate, a few grains of jalap will be proper next day to carry it off.

Bolus of Rhubarb and Mercury.

Take of the best rhubarb, in powder, from a scruple to half a drachm; of calomel, from four to six grains; simple syrup, a sufficient quantity to make a bolus.

This is a proper purge in hypochondriac constitutions; but its principal intention is to expel worms. Where a stronger purge is necessary, jalap may be used instead of the rhubarb.

Pectoral Bolus.

Take of spermaceti, a scruple; gum ammoniac, ten grains; salt of hartshorn, six grains; simple syrup, as much as will make them into a bolus.

This bolus is given in colds and coughs of long standing, asthmas, and beginning consumptions of the lungs. It is generally proper to bleed the patient before he begins to use it.

Purging Bolus.

Take of jalap, in powder, a scruple; cream of tartar, two scruples. Let them be rubbed together, and formed into a bolus, with a simple syrup.

Where a mild purge is wanted, this will answer the purpose very well. If a stronger dose is necessary, the jalap may be increased to half a drachm or upwards.

CATAPLASMS AND SINAPISMS.

CATAPLASMS possess few or no virtues superior to a poultice, which may be so made, as in most cases to supply their place. They are chiefly intended either to act as discutients, or to promote suppuration; and as they may be of service in some cases, we shall give a specimen of each kind.

Discutient Cataplasm.

Take of barley meal, six ounces; fresh hemlock leaves, bruised, two ounces; vinegar, a sufficient quantity. Boil the meal and hemlock in the vinegar for a little time, and then add two drachms of the sugar of lead.

Ripening Cataplasm.

Take of while lily root, four ounces; fat figs and raw onions, bruised, of each one ounce; yellow basilicum ointment, two ounces; gum galbanum, half an ounce;

linseed meal, as much as necessary. Boil the roots along with the figs in a sufficient quantity of water; then bruise and add to them the other ingredients, so as to form the whole into a soft cataplasm. The galbanum must be previously dissolved with the yolk of an egg.

Where it is necessary to promote suppuration, this cataplasm may be used by those who choose to be at the trouble and expence of making it. For my part, I have never found any application more proper for this purpose than a poultice of bread and milk, with a sufficient quantity of either boiled or raw onion in it, and softened with oil or fresh butter.

Sinapisms.

Sinapisms are employed to recal the blood and spirits to a weak part, as in the palsy or atrophy. They are also of service in deep seated pains, as the sciatica, &c. When the gout seizes the head or the stomach, they are applied to the feet to bring the disorder to these parts. They are likewise applied to the patient's soles in the low state of fevers. They should not be suffered to lie on, however, till they have raised blisters, but till the parts become red, and will continue so when pressed by the finger.

The sinapism is only a poultice made with vinegar instead of milk, and rendered warm and stimulating by the addition of mustard, horse radish, or garlic.

The common sinapism is made by taking crumb of bread and mustard seed in powder, of each equal quantities; strong vinegar, as much as is sufficient, and mixing them so as to make a poultice.

When sinapisms of a more stimulating nature are wanted, a little bruised garlic may be added to the above.

CLYSTERS.

THIS class of medicines is of more importance than is generally imagined. Clysters serve not only to evacuate the contents of the belly, but also to convey very active medicines into the system. Opium, for example, may be administered in this way when it will not sit on the stomach, and also in larger doses than in any time it can be taken by the mouth. The Peruvian bark may likewise be, with good effect, administered in form of clyster to persons who cannot take it by the mouth.

A simple clyster can seldom do hurt, and there are many diseases where it may do good. A clyster even of warm water, by serving as a fomentation to the parts, may be of considerable service in inflammations of the bladder, and the lower intestines, &c.

Some substances, as the smoke of tobacco, may be thrown into the bowels in this way, which cannot be done by any other means whatever. This may be easily effected by means of a pair of hand bellows, with an apparatus fitted to them for that purpose.

Nor is the use of clysters confined to medicines. Aliments may also be conveyed in this way. Persons unable to swallow, have been for a considerable time supported by clysters.

Emollient Clyster.

Take of linseed tea and new milk, each six ounces. Mix them.

If fifty or sixty drops of laudanum be added to this, it will supply the place of the Anodyne Clyster.

Laxative Clyster.

Take of milk and water, each six ounces; sweet oil or fresh butter, and brown sugar, of each two ounces. Mix them.

If an ounce of Glauber's salt, or two table spoonfuls of common salt be added to this, it will be the Purging Clyster.

Carminative Clyster.

Take of camomile flowers, an ounce; anise seeds, half an ounce. Boil in a pint and a half of water to one pint.

In hysteric and hypochondriac complaints, this may be administered instead of the Fœtid Clyster, the smell of which is so disagreeable to most patients.

Oily Clyster.

To four ounces of the infusion of camomile flowers, add an equal quantity of Florence oil.

This clyster is beneficial in bringing off small worms lodged in the lower parts of the alimentary canal. When given to children, the quantity must be proportionably lessened.

Starch Clyster.

Take jelly of starch, four ounces; linseed oil, half an ounce. Liquefy the jelly over a gentle fire, and then mix in the oil.

In the dysentery or bloody flux this clyster may be administered after every loose stool, to heal the ulcerated intestines, and blunt the sharpness of corroding humours. Forty or fifty drops may be occasionally added; in which case it will generally supply the place of the Astringent Clyster.

Turpentine Clyster.

Take of common decoction, ten ounces; Venice turpentine, dissolved with the yolk of an egg, half an ounce; Florence oil, one ounce. Mix them.

This diuretic is proper in obstructions of the urinary passages, and in colicky complaints proceeding from gravel.

Vinegar Clyster.

This clyster is made by mixing three ounces of vinegar with five of water gruel.

It answers all the purposes of a common clyster, with the peculiar advantage of being proper either in inflammatory or putrid fevers, especially in the latter.

☞ We think it unnecessary to give more examples of this class of medicines, as ingredients adapted to any particular intention may be occasionally added to one or other of the above forms.

COLLYRIA, OR EYE-WATER.

EYE-waters have been multiplied without number, almost every person pretending to be possessed of some secret preparation for the cure of sore eyes. I have examined many of them, and find that they were very much alike, the basis of most of them being either alum, vitriol, or lead. Their effects evidently are, to brace and store the tone of the parts; hence they are principally of service in slight inflammations, and in that relaxed state of the parts which is induced by obstinate ones.

Camphor is commonly added to these compositions; but as it seldom incorporates properly with water, it can be of little use. Bolus and other earthy substances, as they do not dissolve in water, are also unfit for this purpose.

Collyrium of Alum.

Take of alum half a drachm; agitate it well together with the white of an egg.

This is the Collyrium of Riverius. It is used in inflammation of the eyes, to allay heat, and restrain the flux of humours. It must be spread upon linen, and applied to the eyes; but should not be kept above two or three hours at a time.

Vitriolic Collyrium.

Take of white vitriol, half a drachm; rose water, six ounces. Dissolve the vitriol in the water, and filter the liquor.

This, though simple, is perhaps equal in virtue to most of the celebrated collyria. It is an useful application in weak, watery, and inflamed eyes. Though the slighter inflammations will generally yield to it, yet in those of a more obstinate nature, the assistance of bleeding and blistering will be often necessary.

When a strong astringent is judged proper, a double or triple quantity of the vitriol may be used. I have seen a solution of four times the strength of the above used with manifest advantage.

Collyrium of Lead.

Take sugar of lead and crude sal ammoniac, of each four grains. Dissolve them in eight ounces of common water.

Forty or fifty drops of laudanum may occasionally be added to this collyrium.

Those who chuse may substitute instead of this the collyria of lead recommended by Goulard, which is made by putting twenty-five drops of his Extract of Lead to eight ounces of water, and adding a teaspoonful of brandy.

Indeed, common water and brandy, without any other addition, will in many cases answer very well as a collyrium. An ounce of the latter may be added to five or six ounces of the former; and the eyes, if weak, bathed with it night and morning.

CONFECTIONS.

CONFECTIONS containing above sixty ingredients are still to be found in some of the most reformed dispensatories. As most of their intentions, however, may be more certainly, and as effectually answered by a few glasses of wine, or grains of opium, we shall pass over this class of medicines very slightly.

Japonic Confection.

Take Japan earth three ounces; tormentil root, nutmeg, olibanum, two ounces; opium, dissolved in a suf-

ficient quantity of Liſbon wine, a drachm and a half; ſimple ſyrup and conſerve of roſes, of each fourteen ounces. Mix and make them into an electuary.

This ſupplies the place of the Diaſcordium.

The doſe of this electuary is from a ſcruple to a drachm.

CONSERVES AND PRESERVES.

EVERY apothecary's ſhop was formely ſo full of theſe preparations, that it might have paſſed for a confectioners warehouſe. They poſſeſs very few medicinal properties, and may rather be claſſed among ſweetmeats than medicines. They are ſometimes, however, of uſe, for reducing into boluſes or pills ſome of the more ponderous powders, as the preparations of iron, mercury, and tin.

Conſerves are compoſitions of freſh vegetables and ſugar, beaten together into an uniform maſs. In making theſe preparations, the leaves of vegetables muſt be freed from their ſtalks, the flowers from their cups, and the yellow part of orange-peel taken off with a raſp. They are then to be pounded in a marble mortar, with a wooden peſtle, into a ſmooth maſs; after which, thrice their weight of fine ſugar is commonly added by degrees, and the beating continued till they are uniformly mixed; but the conſerve will be better if only twice its weight of ſugar be added.

Thoſe who prepare large quantities of conſerve, generally reduce the vergetables to a pulp by the means of a mill, and afterwards beat them up with ſugar.

Conſerve of Red Roſes.

Take a pound of red roſe buds, cleared of their heels; beat them well in a mortar, and adding by degrees two pounds of double-refined ſugar, in powder, make a conſerve.

After the ſame manner are prepared the conſerves of orange-peel, roſemary flowers, ſea-wormwood, the leaves of wood-ſorrel, &c.

The conſerve of roſes is one of the moſt agreeable and uſeful preparations belonging to this claſs. A drachm or two of it, diſſolved in warm milk, is ordered to be given as a gentle reſtringent in weakneſs of the ſtomach, and likewiſe in phthiſical coughs, and ſpitting of blood. To have any conſiderable effect, however, it muſt be taken in larger quantities.

Conſerve of Sloes.

This may be made by boiling the ſloes gently in water, being careful to take them out before they burſt; afterwards expreſſing the juice, and beating it up with three times its weight of fine ſugar.

In relaxations of the *uvula* and glands of the throat, this makes an excellent gargle, and may be uſed at diſcretion.

Preſerves are made by ſteeping or boiling freſh vegetables firſt in water, and afterwards in ſyrup, or a ſolution of ſugar. The ſubject is either preſerved moiſt in the ſyrup, or taken out and dried, that the ſugar may candy upon it. The laſt is the moſt uſual method.

Candied Orange Peel.

Soak Seville orangepeel in ſeveral waters, till it loſes its bitterneſs; then boil it in a ſolution, of double-refiened ſugar in water, till it becomes tender and tranſparent.

Candied lemon-peel is prepared in the ſame manner.

It is needleſs to add more of theſe preparations, as they belong rather to the art of the confectioner than that of the apothecary.

DECOCTIONS.

WATER readily extracts the gummy and ſaline parts of vegetables; and though its action is chiefly confined to theſe, yet the reſinous and oily being intimately blended with the gummy and ſaline, are in part taken up along with them. Hence watery decoctions and infuſions of vegetables, conſtitute a large, and not unuſeful, claſs of medicines. Although moſt vegetables yield their virtues to water, as well by infuſion as decoction, yet the latter is often neceſſary, as it ſaves time, and does in a few minutes what the other would require hours, and ſometimes days, to effect.

The medicines of this claſs are all intended for immediate uſe.

Decoction of Althea.

Take of the roots of marſh-mallows, moderately dried, three ounces; raiſins of the ſun, one ounce; water, three pints.

Boil the ingredients in the water till one third of it is conſumed; afterwards ſtrain the decoction and let it ſtand

for ſome time to ſettle. If the roots be thoroughly dried, they muſt be boiled till one half the water be conſumed.

In coughs, and ſharp defluctions from the lungs, this decoction may be uſed for ordinary drink.

The Common Decoction.

Take of camomile flowers, one ounce; elder flowers, and ſweet fennel ſeeds, of each half an ounce; water, two quarts. Boil them for a little, and then ſtrain the decoction.

A medicine equally good may be prepared by infuſing the ingredients for ſome hours in boiling water.

This decoction is chiefly intended as the baſis of clyſters, to which other ingredients may be occaſionally added. It will likewiſe ſerve as a common fomentation, ſpirit of wine or other things being added in ſuch quantity as the caſe may require.

Decoction of Logwood.

Boil three ounces of the ſhavings, or chips, of logwood, in four pints of water, till one-half the liquor is waſted. Two or three ounces of ſimple cinnamon-water may be added to this decoction.

In fluxes of the belly, where the ſtronger aſtringents are improper, a tea-cupful of this decoction may be taken with advantage three or four times a-day.

Decoction of the Bark.

Boil an ounce of the Peruvian bark, groſsly powdered, in a pint and a half of water to one pint; then ſtrain the decoction. If a tea-ſpoonful of the weak ſpirit of vitriol be added to this medicine, it will render it both more agreeable and efficacious.

Compound Decoction of the Bark.

Take of Peruvian bark and Virginian ſnake-root, groſsly powdered, each three drachms. Boil them in a pint of water to one half. To the ſtrained liquor add an ounce and a half of aromatic water.

Sir John Pringle recommends this as a proper medicine towards the decline of malignant fevers, when the pulſe is low, the voice weak, and the head affected with a ſtupor, but with little delirium.

The doſe is four ſpoonfuls every fourth or ſixth hour.

Decoction of Sarſaparilla.

Take of freſh ſarſaparilla root, ſliced and bruiſed, two ounces; ſhavings of guiaicum wood, one ounce. Boil over a ſlow fire in three quarts of water to one, adding towards the end, half an ounce of faſſafras wood, and three drachms of liquorice. Stain the decoction.

This may either be employed as an aſſiſtant to a courſe of mercurial alteratives, or taken after the mercury has been uſed for ſome time. It ſtrengthens the ſtomach, and reſtores freſh and vigour to habits emaciated by the venereal diſeaſe. It may alſo be taken in the rheumatiſm, and cutaneous diſorders proceeding from foulneſs of the blood and juices. For all theſe intentions it is greatly preferable to the *Decoction of Woods*.

This decoction may be taken from a pint and a half to two quarts in a day.

The following decoction is ſaid to be similar to that uſed by *Kennedy*, in the cure of the venereal diſeaſe, and may ſupply the place of the Liſbon diet drink.

Take of ſarſaparilla, three ounces; liquorice and mezereon root, of each half an ounce; ſhavings of guiaicum and ſaſſafras wood, of each one ounce; crude antimony, powdered an ounce and a half. Infuſe theſe ingredients in eight pints of boiling water for twenty-four hours, then boil them till one-half of the water is conſumed; afterwards ſtrain the decoction.

This decoction may be uſed in the ſame manner as the preceding.

Decoction of Seneka.

Take of ſeneka rattle-ſnake root, one ounce; water a pint and a half. Boil to one pint, and ſtrain.

This decoction is recommended in the pleuriſy, dropſy, rheumatiſm, and ſome obſtinate diſorders of the ſkin. The doſe is two ounces, three or four times a day, or oftener, if the ſtomach will bear it.

White Decoction.

Take of the pureſt chalk, in powder, two ounces; gum arabic, half an ounce; water, three pints. Boil to one quart and ſtrain the decoction.

This is a proper drink in acute diſeaſes, attended with, or inclining to a looſeneſs, and where acidities abound in the

omach or bowels. It is peculiarly proper for children when ffliced with ſourneſs of the ſtomach, and for perſons who re ſubject to the heartburn. It may be ſweetened with igar, as it is uſed, and two or three ounces of ſimple cinnamon water added to it.

An ounce of powdered chalk, mixed with two pints of vater, will occaſionally ſupply the place of this decoction, nd alſo of the chalk julep.

DRAUGHTS.

THIS is a proper form for exhibiting ſuch medicines as are intended to operate immediately, and which do not need o be frequently repeated, as purges, vomits, and a few others, which are to be taken at one doſe. Where a medicine requires to be uſed for any length of time, it is better to make up a larger quantity of it at once, which ſaves both trouble and expence.

Anodyne Draught.

Take of liquid laudanum, twenty-five drops; ſimple cinnamon-water, an ounce; common ſyrup, two drachms. Mix them.

In exceſſive pain, where bleeding is not neceſſary, and in great reſtleſſneſs, this compoſing draught may be taken and repeated occaſionally.

Diuretic Draught.

Take of the diuretic ſalt, two ſcruples: ſyrup of poppies, two drachms; ſimple cinnamon-water, and common water, of each an ounce.

This draught is of ſervice in an obſtruction or deficiency of urine.

Purging Draught.

Take of manna, an ounce; ſoluble tartar, or Rochel ſalt, from three to four drachms. Diſſolve in three ounces of boiling water; to which add Jamaica pepper-water, half an ounce.

As manna ſometimes will not ſit upon the ſtomach, an ounce or ten drachms of the bitter purging ſalts, diſſolved in four ounces of water, may be taken inſtead of the above.

Thoſe who cannot take ſalts, may uſe the following draught:

Take of jalap in powder, a ſcruple; common water, an ounce; aromatic tincture, ſix drachms. Rub the jalap with twice its weight of ſugar, and add to it other ingredients.

Sweating Draught.

Take ſpirit of Mindererus, two ounces; ſalt of hartſhorn, five grains; ſimple cinnamon water, and ſyrup of poppies, of each half an ounce. Mix them into a draught.

In recent colds and rheumatic complaints, this draught is of ſervice. To promote its effects, however, the patient ought to drink freely of warm water gruel, or of ſome other weak diluting liquor.

Vomiting Draughts.

Take of ipecacuanha, in powder, a ſcruple; water, an ounce; ſimple ſyrup, a drachm. Mix them.

Perſons who require a ſtronger vomit may add to the above half a grain, or a grain, of emetic tartar.

Thoſe who do not chuſe the powder, may take ten drachms of the ipecacuanha wine; or half an ounce of the wine, and an equal quantity of the ſyrup of ſquills.

ELECTUARIES.

ELECTUARIES are generally compoſed of the lighter powders, mixed with ſyrup, honey, conſerve of mucilage, into ſuch a conſiſtence, that the powders may neither ſeparate by keeping, nor the maſs prove too ſtiff for ſwallowing. They receive chiefly the milder alterative medicines, and ſuch as are not ungrateful to the palate.

Aſtringent electuaries, and ſuch as have pulps of fruit in them, ſhould be prepared only in ſmall quantities; as aſtringent medicines loſe their virtue by being kept in this form, and the pulps of fruits are apt to ferment.

For the extraction of pulps it will be neceſſary to boil unripe fruits, and ripe ones, if they are dried, in a ſmall quantity of water till they become ſoft. The pulp is then to be preſſed out through a ſtrong hair ſieve, or thin cloth, and afterwards boiled to a due conſiſtence, in an earthen veſſel, over a gentle fire, taking care to prevent the matter from burning by continually ſtirring it. The pulps of fruit that are both ripe and freſh may be preſſed out without any previous boiling.

Lenitive Electuary.

Take of ſenna, in fine powder, eight ounces; coriander ſeed, alſo in powder, four ounces; pulp of tamarinds and of

rench prunes, each a pound; mix the pulps and powders gether, and with a ſufficient quantity of ſimple ſyrup, re- ce the whole into an electuary.

A tea ſpoonful of this electuary, taken two or three times day, generally proves an agreeable laxative. It likewiſe rves as a convenient vehicle for exhibiting more active me- cines, as jalap, ſcammony, and ſuch like.

This may ſupply the place of the electuary of *Caſſia*.

Electuary for the Dyſentery.

Take of the Japonic confection, two ounces; Locatelli's lſam; one ounce; rhubarb, in powder, half an ounce; rup of marſhmallows, enough to make an electuary.

It is often dangerous in dyſenteries to give opiates and ſtringents, without interpoſing purgatives. The purga- ve is here joined with theſe ingredients, which renders is a very ſafe and uſeful medicine for the purpoſes expreſſ- d in the title.

About the bulk of a nutmeg ſhould be taken twice or rice a-day, as the ſymptoms and conſtitution may require.

Electuary for the Epilepſy.

Take of Peruvian bark, in powder, an ounce; of pow- red tin, and wild valerian root, each half an ounce; ſim- ple ſyrup, enough to make an electuary.

Dr. Mead directs a drachm of an electuary ſimilar to this be taken evening and morning, in the epilepſy, for the ace of three months. It will be proper, however, to diſ- ntinue the uſe of it for a few days every now and then. I ave added the powdered tin, becauſe the epilepſy often pro- eeds from worms.

Electuary for the Gonorrhœa.

Take of lenitive electuary, three ounces; jalap and rhu- arb, in powder, of each two drachms; nitre, half an ounce; mple ſyrup, enough to make an electuary.

During the inflammation and tention of the urinary paſſa- es, which accompany a virulent gonorrhœa, this cooling xative may be uſed with advantage.

The doſe is a drachm, or about the bulk of a nutmeg, two r three times a-day; more or leſs, as may be neceſſary to eep the body gently open.

An electuary made of cream of tartar and ſimple ſyrup ill occaſionally ſupply the place of this.

After the inflammation is gone off, the following electuary may be uſed:

Take of lenitive electuary, two ounces; balſam of capivi, one ounce; gum guaiacum and rhubard in powder, of each two drachms; ſimple ſyrup, enough to make an electuary. The doſe is the ſame as of the preceding.

Electuary of the Bark.

Take of Peruvian bark, in powder, three ounces; caſcarilla, half an ounce; ſyrup of ginger, enough to make an electuary.

In the cure of obſtinate intermitting fevers, the bark is aſſiſted by the caſcarilla. In hectic habits, however, it will be better to leave out the caſcarilla, and put three drachms of crude ſal ammoniac in its ſtead.

Electuary for the Piles.

Take flowers of ſulphur, one ounce; cream of tartar, half an ounce, treacle, a ſufficient quantity to form an electuary.

A tea-ſpoonful of this may be taken three or four times a-day.

Electuary for the Palſy.

Take of powdered muſtard ſeed, and conſerve of roſes, each an ounce; ſyrup of ginger, enough to make an electuary.

A tea-ſpoonful of this may be taken three or four times a-day.

Electuary for the Rheumatiſm.

Take of conſerve of roſes, two ounces; cinnabar of antimoney, levigated, an ounce and a half; gum guaiacum, in powder, an ounce; ſyrup of ginger, a ſufficient quantity to make an electuary.

In obſtinate rheumatiſms, which are not accompanied with a fever, a tea-ſpoonful of the electuary may be taken twice a-day with conſiderable advantage.

EMULSIONS.

EMULSIONS, beſide their uſe as medicines, are alſo proper vehicles for certain ſubſtances, which could not otherwiſe be conveniently taken in a liquid form. Thus camphor, triturated with almonds, readily unites with water into an

emulison. Pure oils, balsams, resins, and other similar substances,, are likewise rendered miscible with water by the intervention of mucilages.

Common Emulsion.

Take of sweet almonds, an ounce; bitter almonds, a drachm; water, two pints.

Let the almonds be blanched, and beat up in a marble mortar; adding the water by little and little, so as to make an emulsion: afterwards let it be strained.

Arabic Emulsion.

This is made in the same manner as the above, adding to the almonds, while beating, two ounces and a half of the mucilage of gum arabic.

Where cooling liquors are necessary, these emulsions may be used as ordinary drink.

Camphorated Emulsion.

Take of camphor, half a dram; sweet almonds, half a dozen; white sugar, half an ounce; mint water, eight ounces. Grind the camphor and almonds well together in a stone mortar, and add by degrees the mint water; then strain the liquor, and dissolve in it the sugar.

In fevers, and other disorders which require the use of camphor, a table spoonful of this emulsion may be taken every two or three hours.

Emulsion of Gum Ammoniac.

Take of gum ammoniac, two drams; water, eight ounces. Grind the gum with the water poured upon it by little and little, till it is dissolved.

This emulsion is used for attenuating tough, viscid phlegm, and promoting expectoration. In obstinate coughs, two ounces of the syrup of poppies may be added to it. The dose is two table spoonfuls three or four times a-day.

Oily Emulsion.

Take of salt water, six ounces; volatile aromatic spirit, two drachms; Florence oil, an ounce; shake them well together, and add, of simple syrup, half an ounce.

In recent colds and coughs, this emulsion is generally of service; but if the cough proves obstinate, it will succeed better when made with the paregoric elixir of the Edinburgh Dispensatory, instead of the volatile aromatic spirit. A table-spoonful of it may be taken every two or three hours.

EXTRACTS.

EXTRACTS are prepared by boiling the subject in water, and evaporating the strained decoction to a due consistence. By this process some of the more active parts of plants are freed from the useless indissoluble earthy matter, which makes the larger share of their bulk. Water, however, is not the only menstrum used in the preparation of extracts; sometimes rectified spirit alone is employed for that purpose.

Extracts are prepared from a variety of different drugs, as the bark, gentian, jalap, &c.; but as they require a troublesome and tedious operation, it will be more convenient for a private practitioner to purchase what he needs of them from a professed druggist, than to prepare them himself. Such of them as are generally used, are inserted in our list of such drugs and medicines as are to be kept for private practice.

FOMENTATIONS.

FOMENTATIONS are generally intended either to ease pain, by taking off tension and spasms; or to brace and restore the tone and vigour of those parts to which they are applied. The first of these intentions may generally be answered by warm water, and the second by cold. Certain substances, however, are usually added to water with a view to heighten its effects, as anodynes, aromatics, astringents, &c. We shall therefore subjoin a few of the most useful medicated fomentations, that people may have it in their power to make use of them as they chuse.

Anodyne Fomentations.

Take of white poppy heads, two ounces; elder flowers, half an ounce; water, three pints. Boil till one pint is evaporated, and strain out the liquor.

This fomentation, as its title expresses, is used for relieving acute pain.

Aromatic Fomentation.

Take of Jamaica pepper, half an ounce; red wine, a pint. Boil them for a little, and then strain the liquor.

This is intended, not only as a topical application for external complaints, but also for relieving the internal parts. Pains of the bowels, which accompany dysenteries and diarrhœas, flatulent colics, uneasiness of the stomach, and reaching to vomit, are frequently abated by fomenting the abdomen and region of the stomach with the warm liquor.

Common Fomentation.

Take tops of wormwood, and camomile flowers, dried, of each two ounces; water, two quarts. After a slight boiling, pour off the liquor.

Brandy or spirit of wine may be added to this fomentation, in such quantity as the particular circumstances of the case shall require; but these are not always necessary.

Emollient Fomentation.

This is the same as the common decoction.

Strengthening Fomentation.

Take of oak bark, one ounce; granate peel, half an ounce; alum, two drachms; smith's forge water, three pints. Boil the water with the bark and peel to the consumption of one-third; then strain the remaining decoction, and dissolve in it the alum.

This astringent liquor is employed as an external fomentation to weak parts. It may also be used internally.

GARGLES.

HOWEVER trifling this class of medicines may appear, they are by no means without their use. They seldom, indeed, cure diseases, but they often alleviate very disagreeable symptoms; as parchedness of the mouth, foulness of the tongue and fauces, &c. They are peculiarly useful in fevers and sore throats. In the latter, a gargle will sometimes remove the disorder; and in

the former few things are more refreshing or agreeable to the patient, than to have his mouth frequently washed with some soft detergent gargle.

One advantage of these medicines is, that they are easily prepared. A little barley-warter and honey may be had any where; and if to these be added as much vinegar as will give them an agreeable sharpness, they will make a very useful gargle for softening and cleansing the mouth.

Gargles have the best effect when injected with a syringe.

Attenuating Gargle.

Take of water, six ounces; honey, one ounce; nitre a drachm and a half. Mix them.

This cooling gargle may be used either in the inflammatory quinsey, or in fevers, for cleansing the tongue and fauces.

Common Gargle.

Take of rose-water, six ounces; syrup of clove July-flowers, half an ounce; spirit of vitrol, a sufficient quantity to give it an agreeable sharpness. Mix them.

This gargle, besides cleansing the tongue and fauces, acts as a genteel repellent, and will sometimes remove a slight quinsey.

Detergent Gargle.

Take of the emollient gargle, a pint; tincture of myrrh, an ounce; honey, two ounces. Mix them.

When exulcerations require to be cleansed, or the excretion of tough viscid saliva promoted, this gargle will be of service.

Emollient Gargle.

Take an ounce of marshmallow roots, and two or three figs; boil them in a quart of water till near one half of it be consumed; then strain out the liquor.

If an ounce of honey, and half an ounce of spirit of sal ammoniac, be added to the above, it will then be an exceeding good *attenuating gargle.*

This gargle is benificial in fevers, where the tongue and fauces are rough and parched, to soften these parts, and promote the discharge of saliva.

The learned and accurate sir John Pringle observes, that in the inflammatory quinsey, or stagnation of the fauces,

eneſit ariſes from the common gargles; that ſuch as are of an cid nature do more harm than good, by contracting the munctories of the ſaliva and mucus, and thickening thoſe humours; that a decoction of figs in milk and water has a contrary effect, eſpecially if ſome ſal ammoniac be added; by which the ſaliva is made thinner, and the glands are brought to ſecrete more freely; a circumſtance always conducive to the cure.

INFUSIONS.

VEGETABLES yield nearly the ſame properties to water by infuſion as by decoction; and though they may require a longer time to give out their virtues in this way, yet it has ſeveral advantages over the other; ſince boiling is found to diſſipate the finer parts of many bitter and aromatic ſubſtances, without more fully extracting their medicinal principles.

The author of the New Diſpenſatory obſerves, that even from thoſe vegetables which are weak in virtue, rich infuſions may be obtained, by returning the liquor upon freſh quantities of the ſubject, the water loading itſelf more and more with the active parts; and that theſe loaded infuſions are applicable to valuable purpoſes in medicine, as they contain in a ſmall compaſs, the finer, more ſubtle, and active principles of vegetables, in a form readily miſcible with the fluids of the human body.

Bitter Infuſion.

Take tops of the leſſer centaury and camomile flowers, of each half an ounce; yellow rind of lemon and orange peel, carefully freed from the inner white part of each two drachms Cut them in ſmall pieces, and infuſe them in a quart of boiling water.

For indigeſtion, weakneſs of the ſtomach, or want of appetite, a tea-cupfull of this infuſion may be taken twice or thrice a-day.

Infuſion of the Bark.

To an ounce of the bark, in powder, add four or five table-ſpoonfuls of brandy, and a pint of boiling water. Let them infuſe for two or three days.

This is one of the beſt preparations of bark for weak ſtomachs. In diſorders where the corroborating virtues of that medicine are required, a tea-cupful of it may be taken two or three times a-day.

Infuſion of Carduus.

Infuſe an ounce of the dried leaves of carduus benedictus, or bleſſed thiſtle, in a pint of common water, for ſix hours, without heat; then filter the liquor through paper.

This light infuſion may be given, with great benefit, in weakneſs of the ſtomach, where the common bitters do not agree. It may be flavoured at pleaſure with cinnamon, or other aromatic materials.

Infuſion of Linſeed.

Take of linſeed, two ſpoonfuls; liquorice root, ſliced, half an ounce; boiling water, three pints. Let them ſtand to infuſe by the fire for ſome hours, and then ſtrain off the liquor.

If an ounce of the leaves of coltsfoot be added to theſe ingredients, it will then be the *Pectoral Infuſion*. Both theſe are emollient mucilaginous liquors, and may be taken with advantage as ordinary drink in difficulty of making water; and in coughs and other complaints of the breaſt.

Infuſion of Roſes.

Take of red roſes, dried, half an ounce; boiling water, a quart; vitriolic acid, commonly called oil of vitriol, half a drachm; loaf ſugar, an ounce.

Infuſe the water in the roſes for four hours, in an unglazed earthern veſſel; afterwards, pour in the acid, and, having ſtrained the liquor, add to it the ſugar.

In an exceſſive flow of the *menſes*, vomiting of blood, and other hæmorrhages, a tea-cupfull of this gently aſtringent infuſion may be taken every three or four hours. It likewiſe makes an exceeding good gargle.

As the quantity of roſes uſed here can have little or no effect, an equally valuable medicine may be prepared by mixing the acid and water without infuſion.

Infuſion of Tamarinds and Senna.

Take of tamarinds, one ounce; ſenna, and cryſtals of tartar, each two drachms. Let theſe ingredients be infuſed four or five hours in a pint of boiling water; afterwards let the liquor be ſtrained, and an ounce or two of the aromatic tincture added to it. Perſons who are eaſily purged may leave out either the tamarinds or the cryſtals of tartar.

This is an agreeable cooling purge. A tea-cupfull may given every half hour till it operates.

This ſupplies the place of the *Decoction of Tamarinds and nna.*

Spaniſh Infuſion.

Take of Spaniſh juice, cut into ſmall pieces, an ounce; t of tartar three drachms. Infuſe in a quart of boiling wa- for a night. To the ſtrained liquor add an ounce and a lf of the ſyrup of poppies.

In recent colds, coughs, and obſtructions of the breaſt, a -cupfull of this infuſion may be taken with advantage ree or four times a-day.

Infuſion for the Palſy.

Take of horſe-radiſh root ſhaved, muſtard-ſeed bruiſed, ch four ounces; outer rind of orange peel, one ounce. In- ſe them in two quarts of boiling water, in a cloſe veſſel, for enty-four hours.

In paralytic complaints, a tea-cupful of this warm ſtimu- ing medicine may be taken three or four times a day. It cites the action of the ſolids, proves diuretic, and, if the tient be kept warm, promotes the perſpiration.

If two or three ounces of the dried leaves of marſh-trefoil uſed inſtead of the muſtard, it will make the *Antiſcorbutic fuſion.*

JULEPS.

THE baſis of juleps is generally common water, or ſome ſimple diſtilled water, with one-third or one fourth its antity of diſtilled ſpirituous water, and as much ſugar or ſy- p as is ſufficient to render the mixture agreeable. This is arpened with vegetable or mineral acids, or impregnated ith other medicines.

Camphorated Julep.

Take of camphor one drachm; gum arabic, half an ounce; ouble-refined ſugar, an ounce; vinegar, a pint. Grind the mphor with a few drops of rectified ſpirit of wine, till it ows ſoft; then add the gum, previouſly reduced to a muci- ge with equal its quantity of water, and rub them till they e perfectly united. To this mixture add, by little and little,

the vinegar with the ſugar diſſolved in it, ſtill continuing the trituration.

In hyſterical and other complaints, where camphor is proper, this julep may be taken in the doſe of a ſpoonful or two as often as the ſtomach will bear it.

Cordial Julep.

Take of ſimple cinnamon water, four ounces; Jamaica pepper-water, two ounces; volatile aromatic ſpirit, and compound ſpirit of lavender, of each two drachms; ſyrup of orange-peel, an ounce. Mix them.

This is given in the doſe of two ſpoonfuls three or four times a-day, in diſorders accompanied with great weakneſs and depreſſion of ſpirits.

Expectorating Julep.

Take of the emulſion of gum ammoniac, ſix ounces; ſyrup of ſquills, two ounces. Mix them.

In coughs, aſtmas, and obſtructions of the breaſt, two table ſpoonfuls of this julep may be taken every three or four hours.

Muſk Julep.

Rub half a drachm of muſk well together with half an ounce of ſugar, and add to it, gradually, of ſimple cinnamon and peppermint water, each two ounces; of the volatile aromatic ſpirit, two drachms.

In the low ſtate of nervous fevers, hiccupping, convulſions, and other ſpaſmodic affections, two table-ſpoonfuls of this julep may be taken every two or three hours.

Saline Julep.

Diſſolve two drachms of ſalt of tartar in three ounces of freſh lemon-juice, ſtrained; when the effervecence is over, add, of mint-water, and common water, each two ounces; of ſimple ſyrup, one ounce.

This removes ſickneſs at the ſtomach, relieves vomiting, promotes perſpiration, and may be of ſome ſervice in fevers, eſpecially of the inflammatory kind.

Vomiting Julep.

Diſſolve four grains of emetic tartar in eight ounces of water, and add to it half an ounce of the ſyrup of clove July-flow-

In the beginning of fevers, where there is no topical inflammaton, this julep may be given in the doſe of one tableſpoonful every quarter of an hour till it operates. Antimonial vomits ſerve not only to evacuate the contents of the ſtomach, but likewiſe to promote the different excretions. Hence they are found in fevers to have nearly the ſame effect as Dr. *James's Powder*.

MIXTURES.

A MIXTURE differs from a julep in this reſpect, that it receives into its compoſition not only ſalts, extracts, and other ſubſtances diſſoluble in water, but alſo earths, powders, and ſuch ſubſtances as cannot be diſſolved. A mixture is ſeldom either an elegant or agreeable medicine. It is nevertheleſs neceſſary. Many perſons can take a mixture, who are not able to ſwallow a bolus or an electuary: beſides, there are medicines which act better in this than in any other form.

Aſtringent Mixture.

Take ſimple cinnamon-water, and common water, of each three ounces; ſpirituous cinnamon-water an ounce and a half; Japonic confection, half an ounce. Mix them.

In dyſenteries which are not of long ſtanding, after the neceſſary evacuations, a ſpoonful or two of this mixture may be taken every four hours, interpoſing every ſecond or third day a doſe of rhubarb.

Diuretic Mixture.

Take of mint-water, five ounces; vinegar of ſquills, ſix drachms; ſweet ſpirit of nitre, half an ounce; ſyrup of ginger, an ounce and a half. Mix them.

In obſtructions of the urinary paſſages, two ſpoonfuls of this mixture may be taken twice or thrice a day.

Laxative Abſorbent Mixture.

Rub one drachm of magneſia alba in a mortar with ten or twelve grains of the beſt Turkey rhubarb, and add to them three ounces of common water; ſimple cinnamon water, and ſyrup of ſugar, of each one ounce.

As moſt diſeaſes of infants are accompanied with acidities this mixture may either be given with a view to correct theſe, or to open the body. A table-ſpoonful may be taken for a doſe, and repeated three times a-day. To a very young child half a ſpoonful will be ſufficient.

When the mixture is intended to purge, the doſe may either be increaſed, or the quantity of rhubarb doubled.

This is one of the moſt generally uſeful meicines for children with which I am acquainted.

Saline Mixture.

Diſſolve a drachm of the ſalt of tartar in four ounces of boiling water; and, when cold, drop into it ſpirit of vitriol till the effervescence ceaſes; then add, of pepper-mint water, two ounces, ſimple ſyrup one ounce.

Where freſh lemons cannot be had this mixture may occaſionally ſupply the place of the ſaline julep.

Squill Mixture.

Take of ſimple cinnamon-water, five ounces; vinegar of ſquills, one ounce; ſyrup of marſhmallows, an ounce and a half. Mix them.

This mixture by promoting expectoration, and the ſecretion of urine, proves ſerviceable in aſthmatic and dropſical habits. A table-ſpoonful of it may be taken frequently.

OINTMENTS, LINIMENTS, AND CERATES.

NOTWITHSTANDING the extravagant encomiums which have been beſtowed on different preparations of this kind, with regard to their efficacy in the cure of wounds, ſores, &c. it is beyond a doubt, that the moſt proper application to a green wound is dry lint. But though ointments do not heal wounds and ſores, yet they ſerve to defend them from the external air, and to retain ſuch ſubſtances as may be neceſſary for drying, deterging, deſtroying proud fleſh, and ſuch like. For theſe purpoſes, however, it will be ſufficient to inſert only a few of the moſt ſimple forms, as ingredients of a more active natnre can occaſionally be added to them.

Yellow Baſilicum Ointment.

Take of yellow wax, white reſin, and frankincenſe, each a quaier of a pound; melt them together over a gentle fire; then add, of hog's lard prepared, one pound. Strain the ointment while warm.

This ointment is employed for cleanſing and healing wounds and ulcers.

Ointment of Calamine.

Take of olive oil, a pint and a half; white wax, and calamine ſtone levigated, of each half a pound. Let the calamine ſtone, reduced into a fine powder, be rubbed with ſome part of the oil, and afterwards added to the reſt of the oil and wax, previously melted together, continually ſtirring them till quite cold.

This ointment, which is commonly known by the name of Turner's Cerate, is an exceeding good application in burns and excriations from whatever cauſe.

Emollient Ointment.

Take of palm oil, two pounds; olive oil, a pint and a half; yellow wax, half a pound; Venice turpentine, a quarter of a pound. Melt the wax in the oils over a gentle fire; then mix in the turpentine, and ſtrain the ointment.

This ſupplies the place of *Althœa Ointment*. It may be uſed for anointing inflamed parts, &c.

Eye Ointment.

Take of hog's lard prepared, four ounces; white wax two drachms; tutty prepared, one ounce, melt the wax with the lard over a gentle fire, and then ſprinkle in the tutty, continually ſtirring them till the ointment is cold.

This ointment will be more efficacious, and of a better conſiſtence, if two or three drachms of camphor be rubbed up with a little oil, and intimately mixed with it.

Another.

Take of camphor, and calamine ſtone levigated, each ſix drachms, verdegriſe, well prepared, two drachms; hog's lard, and mutton ſuet, prepared, of each two ounces. Rub the

camphor well with the powder; afterwards mix in the lard and ſuet, continuing the triture till they be perfectly united.

This ointment has been long in eſteem for diſeaſes of the eyes. It ought, however, to be uſed with caution, when the eyes are much inflamed or very tender.

Iſſue Ointment.

Mix half an ounce of Spaniſh flies, finely powdered, in six ounces of yellow basilicum ointment.

This ointment is chiefly intended for dreſſing bliſters, in order to keep them open during pleaſure.

Ointment of Lead.

Take of olive oil, half a pint; white wax, two ounces; ſugar of lead, three drachms. Let the ſugar of lead, reduced into a fine powder, be rubbed up with ſome part of the oil, and afterwards added to the other ingredients, previously melted together, continually ſtirring them till quite cold.

This cooling and gently aſtringent ointment may be uſed all caſes where the intention is to dry and skin over the part, as in ſcalding, &c.

Mercurial Ointment.

Take of quickſilver, two ounces; hog's lard, three ounces; mutton ſuet, one ounce. Rub the quickſilver with an ounce of the hog's lard in a warm mortar, till the globules be perfectly extinguiſhed; then rub it up with the reſt of the lard and ſuet, previouſly melted together.

The principal intention of this ointment is to convey mercury into the body by being rubbed upon the ſkin.

Ointment of Sulphur.

Take of hog's lard prepared, four ounces; flowers of ſulphur, an ounce and a half; crude ſal ammoniac, two drachms; eſſence of lemon, ten or twelve drops. Make them into an ointment.

This ointment, rubbed upon the parts affected, will generally cure the itch. It is both the ſafeſt and beſt application for that purpoſe, and when made in this way, has no diſagreeable ſmell.

White Ointment.

Take of olive oil, one pint; white wax and ſpermaceti, of each three ounces. Melt them with a gentle heat, and keep them conſtantly and briſkly ſtirring together, till quite cold.

If two drachms of camphor, previouſly rubbed with a ſmall quantity of oil, be added to the above, it will make the *White camphorated Ointment.*

Liniment for Burns.

Take equal parts of Florence oil, or of freſh drawn linſeed oil, and lime water; ſhake them well together in a wide bottle, ſo as to form a liniment.

This is found to be an exceeding proper application for recent ſcalds or burns. It may either be ſpread upon a cloth, or the parts affected may be anointed with it twice or thrice a-day.

White Liniment.

This is made in the ſame manner as the white ointment, two-thirds of the wax being left out.

This liniment may be applied in caſes of excoriation, where, on account of the largeneſs of the ſurface, the ointments with lead or calamine might be improper.

Liniment for the Piles.

Take of emollient ointment, two ounces; liquid laudanum half an ounce. Mix theſe ingredients with the yolk of an egg, and work them well together.

Volatile Liniment.

Take of Florence oil, an ounce; ſpirit of hartshorn, half an ounce. Shake them together.

This liniment, made with equal parts of ſpirit and oil, will be more efficacious, where the patient's ſkin is able to bear it.

Sir John Pringle obſerves, that in the inflammatory quinſey, a piece of flannel, moiſtened with this liniment, and applied to the throat, to be renewed every four or five hours, is one of the moſt efficacious remedies: and that it ſeldom fails,

after bleeding, either to leſſen or carry off the complaint. The truth of this obſervation I have often experienced.

Camphorated Oil.

Rub an ounce of camphor, with two ounces of Florence oil, in a mortar, till the camphor be entirely diſſolved.

This antiſpaſmodic liniment may be uſed in obſtinate rheumatiſms, and in ſome other caſes accompanied with extreme pain and tenſion of the parts,

PILLS.

MEDICINES which operate in a ſmall doſe, and whoſe diſagreeable taſte or ſmell makes it neceſſary that they ſhould be concealed from the palate, are moſt commonly exhibited in this form. No medicine, however, that is intended to operate quickly, ought to be made into pills, as they often lie for a conſiderable time on the ſtomach before they are diſſolved, ſo as to produce any effect.

As the ingredients which enter the compoſition of pills are generally ſo contrived, that one pill of any ordinary ſize may contain about five grains of the compound, in mentioning the doſe we ſhall only ſpecify the number of pills to be taken; as one, two, three, &c.

Compoſing Pill.

Take of purified opium, ten grains; Caſtle ſoap, half a drachm. Beat them togather, and form the whole into twenty pills.

When a quieting draught will not ſit on the ſtomach, one, two, or three of thoſe pills may be taken, as occaſion requires

Fœtid Pill.

Take of aſafoetida, half an ounce; ſimple ſyrup, as much as is neceſſary to form it into pills.

In hyſteric complaints, four or five pills, of an ordinary ſize, may be taken twice or thrice a-day. They may likewiſe be of no ſervice to perſons afflicted with the aſthma.

When it it neceſſary to keep the body open, a proper quantity of rhubarb, aloes, or jalap, may occaſionally be added to the above maſs.

Hemlock Pill.

Take any quantity of the extract of hemlock, and adding to it about a fifth part of its weight of the powder of the dried leaves, form it into pills of the ordinary size.

The extract of hemlock may be taken from one grain to several drachms in the day. The beſt method, however, of uſing theſe pills, is to begin with one or two, and to increaſe the doſe gradually as far as the patient can bear them, without any remarkable degree of ſtupor or giddineſs.

Mercurial Pill.

Take of purified quickſilver and honey, each half an ounce Rub them together in a mortar, till the globules of mercury are perfectly extinguiſhed; then add, of Caſtile ſoap, two drachms; powdered liquorice, or crumb of bread, a ſufficient quantity to give the maſs a proper conſiſtence for pills.

When ſtronger mercurial pills are wanted, the quantity of quickſilver may be doubled.

The doſe of theſe pills are different, according to the intention with which they are given. As an alterant, two or three may be daily taken. To raiſe a ſalivation, four or five will be neceſſary.

Equal parts of the above pill and powdered rhubarb, made in a maſs, with a ſufficient quantity of ſimple ſyrup, will make a *Mercurial Purging Pill.*

Mercurial Sublimate Pill.

Diſſolve fifteen grains of the corroſive ſublimate of mercury in two drachms of the ſaturated ſolution of crude ſal ammoniac, and make it into a paſte, in a glaſs mortar, with a ſufficient quantity of the crumb of bread. This maſs muſt be formed into one hundred and twenty pills.

This pill, which is the moſt agreeable form of exhibiting ſublimate, has been found efficacious, not only in curing the venereal diſeaſe, but alſo in killing and expelling worms, after other powerful medicines had failed.

For the venereal diſeaſe, four of theſe pills may be taken twice a-day; as an alterant, three, and for worms, two.

Plummer's Pills.

Take of calomel, or ſweet mercury, and precipitated ſulphur of antimony, each three drachms; extract of liquorice,

two drachms. Rub the ſulphur and mercury well together; afterwards add the extract, and, with a ſufficient quantity of the mucilage of gum arabic, make them into pills.

This pill has been found a powerful, yet ſafe, alterative in obſtinate cutaneous diſorders; and has completed a cure after ſalivation had failed. In venereal caſes it has likewiſe produced excellent effects. Two or three pills of an ordinary ſize may be taken night and morning, the patient keeping moderately warm, and drinking after each doſe a draught of decoction of the woods, or of ſarſaparilla.

Purging Pills.

Take of ſuccotrine aloes, and Caſtile ſoap, each two drachms; of ſimple ſyrup, a ſufficient quantity to make them into pills.

Four or five of theſe pills will generally prove a ſufficient purge. For keeping the body gently open, one may be taken night morning. They are reckoned both deobſtruent and ſtomachic, and will be found to anſwer all the purpoſes of Dr. Anderſon's pills, the principal ingredient of which is aloes.

Where aloetic purges are improper, the following pills may be uſed:

Take extract of jalap, and vitriolated tartar, of each two drachms; ſyrup of ginger, as much as will make them of a proper conſiſtence for pills.

Theſe pills may be taken in the ſame quantity as the above.

Pill for the Jaundice.

Take of Caſtile ſoap, ſuccotrine aloes, and rhubarb, of each one drachm. Make them into pills, with a ſufficient quantity of ſyrup muſcilage.

Theſe pills, as their title expreſſes, are chiefly intended for the jaundice, which, with the aſſiſtance of proper diet, they will often cure. Five or six of them may be taken twice a-day, more or leſs, as is neceſſary to keep the body open. It will be proper, however, during the uſe to interpoſe now and then a vomit of ipecacuanha, or tartar emetic.

Stomachic Pill.

Take extract of gentian, two drachms; powdered rhubarb and vitriolated tartar, of each one drachm; oil of mint, thirty drops; ſimple ſyrup, a ſufficient quantity.

Three or four of these pills may be taken twice a-day, for invigorating the ſtomach, and keeping the body gently open.

Squill Pills.

Take powder of dried ſquills, a drachm and a half; gum ammoniac, and cardamon ſeeds, in powder, of each three drachms; ſimple ſyrup, a ſufficient quantity.

In dropſical and aſthmatic complaints two or three of theſe pills may be taken twice a-day, or oftener, if the ſtomach will bear it.

Strengthening Pill.

Take ſoft extract of the bark, and ſalt of ſteel, each a drachm. Make into pills.

In diſorders ariſing from exceſſive debility, or relaxation of the ſolids, as the *chloroſis*, or green ſickneſs; two of theſe pills may be taken three times a-day

PLASTERS.

PLASTERS ought to be of a different conſiſtence according to the purpoſes for which they are intended. Such as are to be applied to the breaſts or ſtomach ought to be ſoft and yielding; while thoſe deſigned for the limbs ſhould be firm and adheſive.

It has bee n ſuppoſed that plaſters might be impregnated with the virtues of different vegetables, by boiling the recent vegetables with the oil employed for the compoſitions of the plaſter; but this treatment does not communicate to the oils any valuable quality.

The *calces* of lead boiled with oils unite with them into a plaſter of a proper conſiſtence which make the of baſis ſeverl other plaſters. In boiling theſe compoſitions a quantity of hot water muſt be added from time to time to prevent the plaſter from burning or growing black. This, however, ſhould be done with care, leſt it cauſe the matter to explode.

Common Plaſter.

Take of common olive oil ſix pints; litharge reduced to a fine powder, two pounds and a half. Boil the litharge and oil together over a gentle fire, continually ſtirring them,

and keeping always about half a gallon of water in the veſſel: after they have boiled about three hours, a little of the plaſter may be taken out and put into cold water, to try if it be of a proper conſiſtence: when that is the caſe, the whole may be ſuffered to cool, and the water well preſſed out of it with the hands.

This plaſter is generally applied in ſlight wounds and excoriations of the ſkin. It keeps the part ſoft and warm, and defends it from the air, which is all that is neceſſary in ſuch caſes. Its principle uſe, however, is to ſerve as a baſis for other plaſters.

Adheſive Plaſter.

Take of common plaſter, half a pound; of Burgundy pitch, a quarter of a pound. Melt them together.

This plaſter is principally uſed for keeping on other dreſſings.

Anodyne Plaſter.

Melt an ounce of adheſive plaſter, and, when it is cooling, mix it with a drachm of powdered opium, and the ſame quantity of camphor, previouſly rubbed up with a little oil.

This plaſter generally gives eaſe in acute pains, eſpecially of the nervous kind.

Bliſtering Plaſter.

Take of Venice turpentine, ſix ounces; yellow wax, two ounces; Spaniſh flies in fine powder, three ounces; powdered muſtard, one ounce. Melt the wax, and while it is warm add to it the turpentine, taking care not to evaporate it by to much heat. After the turpentine and wax are ſufficiently incorporated, ſprinkle in the powders, continually ſtirring the maſs till it be cold.

Though this plaſter is made in a variety of ways, one ſeldom meets with it of a proper conſiſtence. When compounded with oils and other greaſy ſubſtances, its effects are blunted, and it is apt to run; while pitch aud reſin render it too hard and very inconvenient.

When the bliſtering plaſter is not at hand, its place may be ſupplied by mixing with any ſoft ointment a ſufficient quantity of powdered flies; or by forming them into a paſte with flour and vinegar.

Gum Plaſter.

Take of the common plaſter, four pounds; gum ammoniac and galbanum, ſtrained, of each half a pound. Melt them together, and add, of Venice turpentine, ſix ounces.

This plaſter is uſed as a digeſtive and likewiſe for diſcuſſing indolent tumours.

Mercurial Plaſter.

Take of common plaſter, one pouud; of gum ammoniac, ſtrained, half a pound. Melt them together, and, when cooling, add eight ounces of quick-ſilver, previouſly extinguiſhed by triture, with three ounces of hogs' lard.

This plaſter is recommended in pains of the limbs ariſing from a venereal cauſe. Indurations of the glands and other violent tumours, are likewiſe found ſometimes to yield to it.

Stomach Plaſter.

Take of gum plaſter, half a pound; camphorated oil, an ounce and a half; black pepper, or capſicum, where it can be had, one ounce. Melt the plaſter, and mix with it the oil; then ſprinkle in the pepper, previouſly reduced to a fine powder.

An ounce or two of this plaſter, ſpread upon ſoft leather and applied to the region of the ſtomach, will be of ſervice in flatulencies ariſing from hyſteric and hypochondriac affections. A little of the expreſſed oil of mace, or a few drops of the eſſential oil of mint, may be rubbed upon it before it is applied.

This may ſupply the place of the *Antihyſteric Plaſter*.

Warm Plaster.

Take of gum plaſter, one ounce; bliſtering plaſter, two drachms. Melt them over a gentle fire.

This plaſter is uſeful in the ſciatica and other fixed pains of the rheumatic kind: it ought, however, to be worn for ſome time, and to be renewed, at leaſt, once a-week. If this is found to bliſter the part, which is ſometimes the caſe, it muſt be made with a ſmaller proportion of the bliſtering plaſter.

Wax Plaſter.

Take of yellow wax, one pound; white reſin, half a pound; mutton ſuet, three quarters of a pound. Melt them together.

This is generally uſed inſtead of the *Melilot Plaſter*. It is a proper application after bliſters, and in other caſes where a gentle digeſtive is neceſſary.

POWDERS.

THIS is one of the moſt ſimple forms in which medicine can be adminiſtered. Many medicinal ſubſtances, however, cannot be reduced into powder, and others are too diſagreeable to be taken in this form.

The lighter powders may be mixed in any agreeable thin liquor, as tea or water-gruel. The more ponderous will require a more conſiſtent vehicle, as syrup, conserve, jelly, or honey.

Gums, and other ſubſtances which are difficult to powder, ſhould be pounded along with the drier ones; but thoſe which are to dry, eſpecially aromatics, ought to be ſprinkled during their pulverization with a few drops of any water.

Aromatic powders are to be prepared only in ſmall quantities at a time, and kept in glass veſſels cloſely ſtopped. Indeed, no powders ought to be expoſed to the air or kept too long, otherwiſe their virtues will be in great meaſure deſtroyed.

Aſtringent Powder.

Take of alum and Japan earth, each two drachms. Pound them together, and divide the whole into ten or twelve doſes.

In an immoderate flow of the *menſes*, and other hæmorrhages, one of theſe powders may be taken every hour, or every half hour, if the diſcharge be violent.

Powder of Bole.

Take of bole armenic, or French bole, two ounces; cinnamon, one ounce; tormentil root and gum arabic, of each ſix drachms; long pepper, one drachm. Let all theſe ingredients be reduced into a powder.

This warm, glutinous aſtringent powder, is given in fluxes, and other disorders where medicines of that claſs are neceſſary, in the doſe of a ſcruple, or half a drachm.

If a drachm of opium be added, it will make the *Powder of Bole with Opium*, which is a medicine of conſiderable efficacy. It may be taken in the ſame quantity as the former, but not above twice or thrice a-day.

Carminative Powder.

Take of coriander-ſeed, half an ounce; ginger, one drachm; nutmegs, half a drachm; fine ſugar, a drachm and a half. Reduce them into powder for twelve doſes.

This powder is employed for expelling flatulencies ariſing from indigeſtion, particulary thoſe to which hyſteric and hypochondriac perſons are ſo liable. It may likewiſe be given in ſmall quantities to children in their food, when troubled with gripes.

Diuretic Powder.

Take of gum arabic, four ounces; purified nitre, one ounce. Pound them together, and divide the whole into twenty-four doſes.

During the firſt ſtages of the venereal diſeaſe, one of theſe cooling powders may be taken three times a day, with conſiderable advantage.

Aromatic Opening Powder.

Take of the beſt Turkey rhubarb, cinnamon, and fine ſugar, each two drachms. Let the ingredients be pounded, and afterwards mixed well together.

When flatulence is accompanied with coſtiveneſs, a teaſpoonful of this powder may be taken once or twice a-day, according to circumſtances.

Saline Laxative Powder.

Take of ſoluble tartar, and cream of tartar, of each one drachm; purified nitre, half a drachm. Make them into a powder.

In fevers, and other inflammatory diſorders where it is neceſſary to keep the body gently open, one of theſe cooling laxative powders may be taken in a little gruel, and repeated occaſionally.

Steel Powder.

Take filings of ſteel, and loaf ſugar, of each two ounces; ginger, two drachms. Pound them together

In obſtructions of the *menſes*, and other caſes where ſteel is proper, a tea-ſpoonful of this powder may be taken twice a-day, and waſhed down with a little wine or water.

Sudorific Powder.

Take purified nitre and vitriolated tartar, of each half an ounce; opium and ipecacuanha, of each one drachm. Mix the ingredients, and reduce them to a fine powder.

This is generally known by the name of *Dover's Powder* It is a powerful ſudorific. In obſtinate rheumatiſms, and other caſes where it is neceſſary to exite a copious ſweat, this powder may be adminiſtered in the doſe of a ſcruple or half a drachm. Some patients will require two ſcruples. It ought to be accompanied with the plentiful uſe of ſome warm diluting liquor.

Worm Powders.

Take of tin reduced into a fine powder, an ounce; Ethiop's mineral, two drachms. Mix them well together, and divide the whole into ſix doſes.

One of theſe powders may be taken in a little ſyrup, honey, or treacle, twice a-day. After they have been all uſed, the following anthelmintic purge may be proper.

Purging Worm-powder.

Take of powdered rhubarb, a ſcruple; ſcammony and calomel, of each five grains. Rub them together in a mortar for one doſe.

For children, the above doſes muſt be leſſened according to their age.

If the powder of tin be given alone, its doſe may be conſiderably increaſed. The late Dr. Alſton gave it to the amount of two ounces in three days, and ſays, when thus adminiſtered, that it proved an egregious anthelmintic. He purged his patients both before they took the powder and afterwards.

Powder for the Tape-Worm.

Early in the morning the patient is to take in any liquid two or three drachms, according to his age or conſtitution, the root of the male fern reduced into a fine powder. About two hours afterwards, he is to take of calomel, and reſin of ſcammony, each ten grains; gum gamboge, ſix grains. Theſe ingredients muſt be finely powdered and given in a little ſyrup, honey, treacle or any thing that is moſt agreeable to the patient. He is then to walk gently about, now and then drinking a diſh of green tea, till the worm is paſſed. If the powder of the fern produces nauſea or ſickneſs, it might be removed by ſucking the juice of an orange or lemon.

This medicine, which had long been kept a ſecret abroad for the cure of the tape-worm, was ſometime ago purchaſed by the french king and made public for the benefit of mankind. Not having had an opportunity of trying, I can ſay nothing from experience concerning its efficacy. It ſeems, however, from its ingredients to be an active medicine, and ought to be taken with care. The doſe here preſcribed is ſufficient for the ſtrongeſt patient; it muſt, therefore be reduced according to the age and conſtitution.

SYRUPS.

SYRUPS were ſome time ago looked on as medicines of conſiderable value. They are at preſent, however regarded cheifly as vehicles for medicines of greater efficacy, and are uſed for ſweating draughts, juleps, or mixtures; and for reducing the lighter powders into boluſes, pills, and electuaries. As all theſe purpoſes may be anſwered by the ſimple ſyrup alone, there is little occaſion for any other; eſpecially as they are ſeldom found but in a ſtate of fermentation; and as the doſe of any medicine given in this form is very uncertain, perſons who ſerve the public muſt keep what their cuſtomers call for; but to the private practitioner nine-tenths of the ſyrups uſually kept in the ſhops are unneceſſary.

Simple Syrup

Is made by diſſolving in water, either with or without heat about double its weight of fine ſugar.

If twenty-five drops of laudanum be added to an ounce of the ſimple ſyrup, it will anſwer and ſuply the place of diacodium, or the ſyrup of poppies, and will be found a more ſafe and certain medicine.

The lubricating virtues of ſyrup of marſhmallows may likewiſe be ſupplied, by adding to the common ſyrup a ſufficient quantity of the mucilage of gum arabic.

Thoſe who chuſe to preſerve the juice of lemons in form of ſyrup may diſſolve in it, by the heat of a warm bath, nearly double its weight of fine sugar. The juice ought to be previouſly ſtrained and ſuffered to ſtand till it ſettles.

The ſyrup of ginger is ſometimes of uſe as a warm vehicle for giving medicines to perſons afflicted with flatulency. It may be made by infuſing two ounces of bruiſed ginger in two pints of boiling water for twenty-four hours. After the liquor has been ſtrained, and has ſtood to ſettle for ſome time, it may be poured off, and a little more than double its weight of fine powdered ſugar diſſolved in it.

TINCTURES, ELIXIRS, &c.

RECTIFIED ſpirit is the direct menſtruum of the reſins and eſſential oils of vegetables, and totally extracts theſe active principles from ſundry ſubſtances, which yeild them to water, either not at all, or only in part.

It diſſolves likewiſe thoſe parts of animal ſubſtances in which their peculiar ſmells and taſte reſide. Hence the tinctures prepared with rectified ſpirit form an uſeful and elegant claſs of medicines, poſſeſſing many of the moſt eſſential virtues of ſimples, without being clogged with their inert or uſeleſs parts.

Water, however, being the proper menſtrum of the gummy, ſaline, and ſaccharine parts of medical ſubſtances, it will be neceſſary, in the preparation of ſeveral tinctures, to make uſe of a weak ſpirit, or a compoſition of rectified ſpirit and water.

Aromatic Tincture.

Infuſe two ounces of Jamaica peper in two pints of brandy without heat, for a few days; then ſtrain of the tincture.

This ſimple tincture will ſufficiently anſwer all the intentions of more coſtly preparations of this kind. It is rather too hot to be takenf by itſel; but is very proper for mix-

ing with ſuch medicines as might otherwiſe prove too cold for the ſtomach.

Compound Tincture of the Bark.

Take of Peruvian bark, two ounces; Seville orange-peel and cinnamon, of each half an ounce. Let the bark be powdered, and the other ingredients bruiſed; then infuſe the whole in a pint and a half of brandy, for five or ſix days, in a cloſe veſſel; afterwards ſtrain off the tincture.

This tincture is not only beneficial in intermitting fevers, but alſo in the ſlow, nervous, and putrid kinds, eſpecially towards their decline.

The doſe is from one drachm to three or four, every fifth or ſixth hour. It may be given in any ſuitable liquor, and occaſionally ſharpened with a few drops of the ſpirit of vitriol.

Volatile Fœtid Tincture.

Infuſe two ounces of aſafœtida in one pint of volatile aromatic ſpirit, for eight days, in a cloſe bottle, frequently ſhaking it; then ſtrain the tincture.

This medicine is beneficial in hyſteric diſorders, especially when attended with lowness of spirits, and faintings. A tea-ſpoonful of it may be taken in a glaſs of wine, or a cup of penny-royal tea.

Volatile Tincture of Gum Guaiacum.

Take of gum guaiacum, four ounces; volatile aromatic ſpirit, a pint. Infuse without heat, in a veſſel well ſtopped for a few days; then ſtrain off the tincture*.

In rheumatic complaints, a tea-ſpoonful of this tincture may be taken in a cup of the infuſion of water trefoil, twice or thrice a-day.

Tincture of Black Hellebore.

Infuſe two ounces of the roots of black hellebore bruiſed, in a pint of proof ſpirit, for ſeven or eight days; then filter

* A very good tincture of guaiacum, for domestic use, may be made by infusing two or three ounces of the gum in a bottle of rum or brandy.

the tincture through paper. A ſcruple of cochineal may be infuſed along with the roots, to give the tincture a colour.

In obſtructions of the *menſes*, a tea-ſpoonful of this tincture may be taken in a cup of camomile or penny-royal tea twice a day.

Aſtringent Tincture.

Digeſt two ounces of gum kino, in a pint and a half of brandy, for eight days; afterwards ſtrain it for uſe.

This tincture, though not generally known, is a good aſtringent medicine. With this view, an ounce, or more, of it may be taken three or four times a day.

Tincture of Myrrh and Aloes.

Take of gum myrrh, an ounce and a half; hepatic aloes, one ounce. Let them be reduced to a powder, and infuſed in two pints of rectified ſpirits, for ſix days, in a gentle heat; then ſtrain the tincture.

This is principally uſed by ſurgeons for cleanſing foul ulcers and reſtraining the progreſs of gangrenes. It is alſo, by ſome, recommended as a proper application in green wounds.

Tincture of Opium, or Liquid Laudanum.

Take of crude opium, two ounces; ſpirituous aromatic water, and mountain wine, of each ten ounces. Diſſolve the opium, ſliced, in the wine, with a gentle heat, frequently ſtirring it; afterwards add the ſpirit, and ſtrain off the tincture.

Sacred Tincture, or Tincture of Hiera Picra.

Take of ſuccotrine aloes in powder, one ounce; Virginian ſnake root and ginger, of each two drachms. Infuſe in a pint of mountain wine, and half a pint of brandy, for a week, frequently ſhaking the bottle, then ſtrain off the tincture.

This is a ſafe and uſeful purge for perſon of languid and phlegmatic habit; but it is thought to have better effects taken in ſmall doſes as a laxative.

The dose, as a purge, is from one to two ounces.

Compound Tincture of Senna.

Take of senna, one ounce; jalap, coriander seeds, and cream of tartar, of each half an ounce. Infuse them in a pint and a half of French brandy for a week; then strain the tincture, and add to it four ounces of fine sugar.

This is an agreeable purge, and answers all the purposes of the Elixir salutis, and of Daffy's Elixir.

The dose is from one to two or three ounces.

Tincture of Spanish Flies.

Take of Spanish flies, reduced to a fine powder, two ounces; spirit of wine, one pint. Infuse for two or three days; then strain off the tincture.

This is intended as an acrid stimulant for external use. Parts affected with the palsy or chronic rheumatism may be frequently rubbed with it.

Tincture of the Balsam of Tolu.

Take of the balsam of Tolu, an ounce and a half; rectified spirit of wine, a pint. Infuse in a gentle heat until the balsam is dissolved; then strain the tincture.

This tincture possesses all the virtues of the balsam. In coughs, and other complaints of the breast, a tea-spoonful or two of it may be taken in a bit of loaf sugar. But the best way of using it is in syrup. An ounce of the tincture, properly mixed with two pounds of simple syrup, will make what is commonly called the Balsamic Syrup.

Tincture of Rhubarb.

Take of rhubarb, two ounces and a half: lesser cardamom seeds half an ounce; brandy, two pints. Digest for a week, and strain the tincture.

Those who chuse to have a vinous tincture of rhubarb may infuse the above ingredients in a bottle of Lisbon wine, adding to it about two ounces of proof spirits.

If half an ounce of gentian root, and a dra hm of Virginian snake-root be added to the above ingredients, it will make the bitter tincture of rhubarb.

All these tinctures are designed as stomachics and corroborants, as well as purgatives. In weaknesses of the sto-

mach, indigestion, laxity of the intestines, fluxes, colicky, and such like complaints, they are frequently of great service. The dose is from half a spoonful to three or four spoonfuls or more, according to the circumstances of the patient, and the purposes it is intended to answer.

Paregoric Elixir.

Take of flowers of benzoin, half an ounce; opium, two drachms. Infuse in one pound of the volatile aromatic spirit, four or five days, frequently shaking the bottle; afterwards strain the elixir.

This is an agreeable and safe way of administering opium. It eases pain, allays tickling coughs, relieves difficult breathing, and is useful in many disorders of children, particularly the hooping cough.

The dose to an adult is from fifty to an hundred drops.

Sacred Elixir.

Take of rhubarb, cut small, ten drachms; succotrine aloes in powder, six drachms; lesser cardamom seeds, half an ounce; French brandy, two pints. Infuse for two or three days, and then strain the elixir.

This useful stomachic purge may be taken from one ounce to an ounce and a half.

Stomachic Elixir.

Take of gentian root two ounces; Curassoa oranges, one ounce; Virginian snake-root, half an ounce. Let the ingredients be bruised, and infused for two or three days in two pints of French brandy; afterwards strain out the elixir.

This is an elegant stomachic bitter. In flatulencies, indigestion, want of appetite, and such like complaints, a small glass of it may be taken twice a day. It likewise relieves the gout in the stomach, when taken in a large dose.

Acid Elixir of Vitriol.

Take of the aromatic tincture, one pint; oil of vitriol, three ounces. Mix them gradually, and after the faeces have subsided, filter the elixir through paper, in a glass funnel.

This is one of the best medicines that I know for hysteric and hypochondriac patients, afflicted with flatulencies arising from relaxation or debility of the stomach and intestines.

It will succeed where the most celebrated stomachic bitters have no effect. The dose is from ten to forty drops, in a glass of wine or water, or a cup of any bitter infusion, twice or thrice a-day. It should be taken when the stomach is most empty.

Camphorated Spirit of Wine.

Dissolve an ounce of camphor in an pint of rectified spirits.

This solution is chiefly employed as am embrocation in bruises, palsies, the chronic rheumatism, and for preventing gangrenes.

The above quantity of camphor, dissolved in half a pound of the volatile aromatic spirit, makes Ward's Essence.

Spirit of Mindererus.

Take of volatile sal ammoniac, any quantity. Pour on it gradually distilled vinegar, till the effervescence ceases.

This medicine is useful in promoting a discharge both by the skin and urinary passages. It is also a good external application in strains and bruises.

When intended to raise a sweat, half an ounce of it in a cup of warm gruel may be given to the patient in bed every hour till it has the desired effect.

VINEGARS.

VINEGAR is an acid produced from various liquors by a second fermentation. It is an useful medicine both in inflammatory and putrid disorders. Its effects are to cool the blood, quench thirst, counteract a tendency to putrefaction, and allay inordinate motions of the system. It likewise promotes the natural secretions, and in some cases excites a copious sweat, while the warm medicines, called alexipharmic, tend rather to prevent that salutary evacuation.

Weakness, faintings, vomitings, and other hysteric affections, are often relieved by vinegar applied to the mouth and nose, or received into the stomach. It is of excellent use also in correcting many poisonous substances, when taken into the stomach; and in promoting their expulsion, by the different emunctories, when received into the blood.

Vinegar is not only an useful medicine, but serves likewise to extract, in tolerable perfection, the virtues of several other medicinal substances. Most of the odoriferous flowers

impart to it their fragrance, together with a beautiful purplish or red colour. It also assists or coincides with the intention of squills, garlic, gum ammoniac, and several other valuable medicines.

The effects, however, are not to be expected from every thing that is sold under the name of vinegar, but from such as is sound and well prepared.

The best vinegars are those prepared from French wines.

It is necessary for some purposes that the vinegar be distilled; but as this operation requires a particular chemical aparatus, we shall not insert it.

Vinegar of Litharge.

Take of litharge, half a pound; strong vinegar, two pints. Infuse them together in a moderate heat for three days, frequently shaking the vessel; then filter the liquor for use.

This medicine is little used, from a general notion of its being dangerous. There is reason, however, to believe that the preparations of lead with vinegar are possessed of some valuable properties, and that they may be used in many cases with safety and success.

A preparation of a similar nature with the above, has of late been extolled by Goulard, a French surgeon, as a safe and extensively useful medicine, which he calls the Extract of Saturn, and orders it to be made in the following manner.

Take of litharge, one pound; vinegar made of French wine, two pints. Put them together into a glazed earthen pipkin, and let them boil, or rather simmer, for an hour, or an hour and a quarter, taking care to stir them all the while with a wooden spatula. After the whole has stood to settle, pour off the liquor which is upon the top, into bottles for use.

With this extract Goulard makes his Vegeto-mineral water †, which he recommends in a great variety of external disorders, as inflammations, burns, bruises, sprains, ulcers, &c.

He likewise prepares with it a number of other forms of medicine, as poultices, plasters, ointments, powder, &c.

Vinegar of Roses.

Take of red roses, half a pound; strong vinegar, half a gallon. Infuse in a close vessel for several weeks, in a gentle heat; and then strain off the liquor.

† See Collyrium of Lead.

This is princically used as an embrocation for head-achs, &c.

Vinegar of Squills.

Take of dried squills, two ounces; distilled vinegar, two pints. Infuse for ten days or a fortnight in a gentle degree of heat, afterwards strain off the liquor, and add to it about a twelfth part of its quantity of proof spirit.

This medicine has good effects in disorders of the breast occasioned by a load of viscid phlegm. It is also of use in hydropic cases for promoting a discharge of urine.

The dose is from two drachms to two ounces, according to the intention for which it is given. When intended to act as a vomit, the dose ought to be large. In other cases, it must not only be exhibited in small doses, but also mixed with cinnamon-water, or some other agreeable aromatic liquor, to prevent the nausea it might otherwise occasion.

WATERS BY INFUSION, &c.

Lime Water.

POUR two gallons of water gradually upon a pound of fresh burnt quicklime, and when the ebullition ceases, stir them well together; then suffer the whole to stand at rest, that the lime may settle, and afterwards filter the liquor through paper, which is to be kept in vessels closely stopped.

The lime water from calcined oyster-shells is prepared in the same manner.

Lime water is principally used for the gravel; in which case, from a pint to two or more of it may be drunk daily. Externally it is used for washing foul ulcers, and removing the itch, and other diseases of the skin.

Compound Lime Water.

Take shavings of guiacum wood, half a pound; liquorice root, one ounce; sassafras bark, half an ounce; coriander seeds, three drachms; simple lime water, six pints

Infuse without heat for two days, and then strain off the liquor.

In the same manner may lime water be impregnated with the virtues of other vegetable substances. Such impregnation

not only renders the water more agreeable to the palate, but also a more efficacious medicine, especially in cutaneous disorders, and foulness of the blood and juices.

It may be taken in the same quantity as the simpl ewater.

Sublimate Water.

Dissolve eight grains of the corrosive sublimate in a pint of cinnamon-water.

If a stronger solution is wanted, a double or triple quantity of sublimate may be used.

The principal intention of this is to cleanse foul ulcers, and consume proud flesh.

Styptic Water.

Take of blue vitriol and alum, each an ounce and a half; water, one pint. Boil them until the salts are dissolved, then filter the liquor, and add to it a drachm of the oil of vitriol.

This water is used for stopping a bleeding at the nose, and other hæmorrhages; for which purpose cloths or dossils dipt in it must be applied to the part.

Tar Water.

Pour a gallon of water on two pounds of Norway tar, and stir them strongly together on a wooden rod; after they have stood to settle for two days, pour off the water for use.

Though tar water falls greatly short of the character which has been given of it, yet it possesses some medicinal virtues. It sensibly arises the pulse, increases the secretions, and sometimes opens the body, or occasions vomiting.

A pint of it may be drank daily, or more, if the stomach can bear it. It is generally ordered to be taken on an empty stomach, viz. four ounces morning and evening, and the same quantity about two hours after breakfast and dinner.

SIMPLE DISTILLED WATERS.

A GREAT number of distilled waters were formerly kept in the shops, and are still retained in some Dispensatories. But we consider them chiefly in the light of grateful diluents, and suitable vehicles for medicines of greater efficacy, or for rendering the disgustful ones more agreeable to the palate.

We ſhall, therefore, only inſert a few of thoſe which are beſt adapted to theſe intentions.

The management of a ſtill being now generally underſtood, it is needleſs to ſpend time in giving directions for that purpose.

Cinnamon Water.

Steep one pound of cinnamon bark, bruiſed, in a gallon and a half of water, and one pint of brandy, for two days; and then diſtil off one gallon.

This is an agreeable aromatic water, poſſeſſing in high degree the fragrance and cordial virtues of the ſpice.

Pennyroyal Water.

Take of pennyroyal leaves, dried, a pound and a half; water, from a gallon and a half to two gallons. Draw off by a diſtillation one gallon.

This water poſſeſſes, in a conſiderable degree, the ſmell, taſte, and virtues of the plant. It is given in mixtures and juleps to hyſteric patients.

An infuſion of the herb in boiling water, anſwers nearly the ſame purpoſes.

Peppermint Water.

This is made in the ſame manner as the preceding.

Spearmint Water.

This may alſo be prepared in the ſame way as the pennyroyal water.

Both theſe are uſeful ſtomachic waters, and will ſometimes relieve vomiting, eſpecially when it proceeds from indigeſtion, or cold viſcid phlegm. They are likewiſe uſeful in ſome colicky complaints, the gout in the ſtomach, &c. particularly the peppermint water

An infuſion of the freſh plant is frequently found to have the ſame effects as the diſtilled water.

Roſe Water.

Take of roſes, freſh gathered, ſix pounds; water two gallons. Diſtil off one gallon.

This water is principally valued on account of its fine flavour.

Jamaica Pepper Water.

Take of Jamaica pepper, half pound; water, a gallon and a half. Diſtil off one gallon.

This is a very elegant diſtilled water, and may in moſt caſes ſupply the place of the more coſtly ſpice waters.

SPIRITUOUS DISTILLED WATERS.

Spirituous Cinnamon Water.

TAKE of cinnamon bark, one pound; proof ſpirit, and common water, of each one gallon. Steep the cinnamon in the liquor for two days; then diſtil off one gallon.

Spirituous Jamaica Pepper Water.

Take of Jamaica pepper, half a pound; proof ſpirit, three gallons; water, two gallons. Diſtil off three gallons.

This is a ſufficiently agreeable cordial and may ſupply the place of the *aromatic water*.

WHEYS.

Alum Whey.

BOIL two drachms of powdered alum in a pint of milk till it is curdled; then ſtrain out the whey.

This whey is beneficial in an immoderate flow of the menſes, and in a diabetes, or exceſſive diſcharge of urine.

The doſe is two, three, or four ounces, according as the ſtomach will bear it, three times a-day. If it ſhould occaſion vomiting, it may be diluted.

Muſtard Whey.

Take milk and water, of each a pint; bruiſed muſtard ſeed, an ounce and a half. Boil them together till the curd is perfectly ſeparated; afterwards ſtrain the whey through a cloth.

This is the most elegant, and by no means the leaſt efficacious method of exhibiting muſtard. It warms and invigorates the habit, and promotes the different ſecretions. Hence in the low ſtate of nervous fevers, it will often ſupply the

place of wine. It is alſo of uſe in the chronic rheumatiſm, palſy, dropſy, &c. The addition of a little ſugar will render it more agreeable.

The doſe is an ordinary tea-cupful four or five times a-day.

Scorbutic Whey.

This whey is made by boiling half a pint of the ſcorbutic juices in a quart of cow's milk. More benefit, however, is to be expected from eating the plants, than from their expreſſed juices.

The ſcorbutic plants are, bitter oranges, brooklime, garden ſcurvy-graſs and water-creſſes.

A number of other wheys may be prepared nearly in the ſame manner, as orange whey, cream of tartar whey, &c. Theſe are cooling pleaſant drinks in fevers, and may be rendered cordial, when neceſſary, by the addition of wine.

WINES.

THE effects of wine are to raiſe the pulſe, promote perſpiration, warm the habit, and exhilarate the ſpirits. The red wines, beſides theſe effects, have an aſtringent quality, by which they ſtrengthen the tone of the ſtomach and inteſtines, and by this means prove ſerviceable in reſtraining immoderate ſecretions.

The thin ſharp wines have a different tendency. They paſs off freely by the different emunctories, and gently open the body. The effects of the full bodied wines, are, however, much more durable than thoſe of the thinner.

All ſweet wines contain a glutinous ſubſtance, and do not paſs off freely. Hence they will heat the body more than an equal quantity of any other wine, though it ſhould contain fully as much ſpirit.

From the obvious qualities of wine, it muſt appear to be an excellent cordial medicine. Indeed, to ſay the truth, it is worth all the reſt put together.

But to anſwer this character it muſt be ſound and good. No benefit is to be expected from the common traſh that is often ſold by the name of wine, without poſſeſſing one drop of the juice of the grape. Perhaps no medicine is more rarely obtained genuine than wine.

Wine is not only uſed as a medicine, but is alſo employed as a menſtruum for extracting the virtues of other medicinal ſubſtances; for which it is not ill adapted, being a compound of

water, inflammable ſpirit, and acid; by which means it is enabled to act upon vegetable and animal ſubſtances, and alſo to diſſolve ſome bodies of the metalic kind, ſo as to impregnate itſelf with their virtues, as ſteel, antimony, &c.

Anthelmintic Wine.

Take of rhubarb, half an ounce; worm-ſeed, an ounce. Bruiſe them, and infuſe without heat in two pints of red port wine for a few days then ſtrain off the wine.

As the ſtomach of perſons afflicted with worms are always debilitated, red wine alone will often prove ſerviceable: it muſt, however have ſtill better effects when joined with bitter and purgative ingredients, as in the above form.

A glaſs of this wine may be taken twice or thrice a-day.

Animonial Wine.

Take glaſs of antimony, reduced to a fine powder, half an ounce, Liſbon wine, eight ounces. Digeſt, without heat for three or four days, now and then ſhaking the bottle; afterwards filter the wine through paper.

The doſe of this wine varies according to the intention. As an alterative and diaphoretic, it may be taken from ten to fifty or ſixty drops. In a larger doſe it generally proves cathartic, or excites vomiting.

Bitter Wine.

Take of gentian root, yellow rind of lemon peel, freſh, each one ounce; long pepper, two drachms; mountain wine, two pints. Infuſe without heat for a week, and ſtrain out the wine for uſe.

In complaints ariſing from weakneſs of the ſtomach or indigeſtion, a glaſs of this wine may be taken an hour before dinner and ſupper.

Ipecacuanha Wine.

Take of ipecacuanha, in powder, one ounce; mountain wine, a pint. Infuſe for three or four days; then filter the tincture.

This is a ſafe vomit, and anſwers extremely well for ſuch perſons as cannot ſwallow the powder, or whoſe ſtomachs are too irritable to bear it.

The doſe is from one ounce to an ounce and a half.

Chalybeate or Steel Wine.

Take filings of iron, two ounces; cinnamon and mace, of each two drachms; Rheniſh wine, two pints. Infuſe for three or four weeks, frequently ſhaking the bottle; then paſs the wine through a filter.

In obſtructions of the menſes, this preparation of iron may be taken, in the doſe of half a wine-glaſs twice or thrice a-day.

The medicine would probably be as good if made with Liſbon wine, ſharpened with half an ounce of the cream of tartar, or a ſmall quantity of vitriolic acid.

Stomach Wine.

Take of Peruvian bark, groſsly powdered, an ounce; cardamom ſeeds, and orange peel, bruiſed, of each two drachms.

Infuſe in a bottle of white port or Lisbon wine for five or ſix days; then ſtrain off the wine.

This wine is not only of ſervice in debility of the ſtomach and inteſtines, but may alſo be taken as a preventative, by perſons liable to the intermittent fever, or who reſide in places where this diſeaſe prevails. It will be of uſe likewiſe to thoſe who recover ſlowly after fevers of any kind, as it aſſiſts digeſtion and helps to reſtore the tone and vigour of the ſyſtem.

A glaſs of it may be taken two or three times a day.

GENERAL CATALOGUE OF MEDICINES

In common use, according to their Engliſh names; with their doſes.

N. B. The doſes here ſet down are meant for adults, but muſt be varied according to the ſtrength, ſex, and conſtitution of the patient.

Having in view a ſimilar diſcretion as to the conſtitution of children, the following may be given as a general rule to apportion doſes for them.

From 20 to 14	- -	two-thirds.
14 — 9	- -	one-half.
9 — 6	- -	one-third.
6 — 4	- -	one-fourth.
4 — 2	- -	one-ſixth.
2 — 1	- -	one-tenth.
Under 1	- -	one-twelfth.

A.

ACACIA, the expreſſed juice,	from 2 ſcuruples to	1 drachm
Acid, the acetous - -	2 ſcruples	1 drachm
, muriatic - -	20 drops	40 drops
, nitrous, diluted -	15 drops	30 drops
, vitriolic, diluted - -	25 drops	40 drops
Æther, vitriolic - -	1 drachm	2 drachms
Æthiops mineral -	10 grains	30 grains
Aloes - - -	15 grains	30 grains
Alum - - -	10 grains	20 grains
, burned - -	6 grains	12 grains
Amber, prepared -	½ drachm	1 drachm
Ammoniac, gum -	15 grains	30 grains
, milk of -	½ ounce	1 ounce
Angelica, the root powdered	1 drachm	1½ drachm
Aniſe, the ſeeds -	20 grains	1 drachm
Antimony - -	20 grains	1 drachm
, calcined -	2 ſcruples	1 drachm
, glaſs of -	½ grain	2 grains
Aſafœtida - -	6 grains	half dr.
, milk of -	½ ounce	1 ounce
Aſarum - -	3 grains	5 grains

B.

Balſam of capivi	from	20 drops	to 60 drops
, Canadian		———	———
, of Peru		———	———
of Tolu		———	———
Bark, Peruvian, powder		2 ſcruples	2 drachms
Bear's foot powder		10 grains	20 grains
Benzoin, reſin of		———	———
, flowers of		———	———
Biſtort, powder of the root		1 ſcruple	1 drachm
Bleſſed thiſtle		20 grains	1 drachm
, expreſſed juice of		6 drachms	2 ounces
Bole, Armenian		10 grains	2 drachms
, French		———	———
Borax		10 grains	15 grains
Broom, aſhes of the tops		1 ſcruple	1 drachm
Burdock, powder of the root		20 grains	1 drachm

C.

Calomel		1 gr. to 3	gr. alterative
		3	12 purgative
Camphor		12 grains	½ drachm
Canella alba, powder of		2 ſcruples	2 drachms
Cantharides		1½ grains	4 grains
Cardamoms		15 grains	20 grains
Caraway ſeeds		20 ditto	40 ditto
Caſcarilla bark		10 ditto	40 ditto
Caſſia, the pulp		4 drachms	1 ounce
Caſtor		10 grains	1 drachm
Catechu		15 ditto	30 grains
Camomile, in powder		20 ditto	1 drachm
Chalk		20 ditto	2 ſcruples
Cinnamon		15 ditto	1 drachm
Colocynth		20 ditto	1 drachm
Columbo		20 ditto	1 drachm
Confection, aromatic		20 ditto	2 ſcruples
, opiate		20 ditto	2 ſcruples
Crabs' claws, prepared		20 ditto	1 drachm
Conſerve of roſes		4 drachms	1 ounce
ſquills		20 grains	1½ ſcruples

Conſerve of arum	from	20 grains	to 1 drachm
Contrayerva	-	20 ditto	2 ſcruple
Coriander ſeed	-	15 grains	1 drachm
Cowhage, the ſpiculae of one pod mixed with honey or molaſſes			

D.

Dandelyon, expreſſed juice of	1 ounce	3 ounces
Decoction of hartſhorn, half pint		
broom, 1 oz. to a pint of water, to be taken by tea-cupfuls		
Peruvain bark -	2 ounces	4 ounces
the inner bark of the elm	6 ditto	16 oz. daily
ſarſaparilla,	6 ditto	16 ditto
compound guaiacum, 3 drach. to a pint of water. A pint daily		

E.

Electuary of caſſia	4 drachms	1 ounce
ſcammony -	20 grains	1 drachm
lenitive, or of ſenna	2 ſcruples	6 drachms
Elixir of vitriol -	25 drops	50 drops
Elecampane, powder of the root	20 grains	1 drachm
Extract of broom tops -	½ drachm	1 drachm
Peruvain bark -	10 grains	½ drachm
caſcarilla -	10 grains	½ drachm
cammomile -	20 grains	1 drachm
colocynth -	15 grains	25 grains
gentian -	10 grains	½ drachm
liquorice -	1 drachm	½ ounce
logwood -	10 grains	½ drachm
black hellebore -	3 grains	10 grains
jalap -	10 grains	20 grains
guaiacum -	10 grains	20 grains
white poppies -	2 grains	5 grains

Extract of rue	from	10 grains	to 20 grains
ſavin	-	20 grains	30 grains
ſenna	-	20 grains	30 grains

F.

Fern, powder of the root	half dra.	half oz.
Fennel ſeed -	20 grains	1 drachm
Fox glove, powder of the leaves, or a drachm infuſed in a pint of boiling water, of which a doſe is	half grain 1 ounce	3 grains

G.

Galbanum -	20 grains	30 grains
Galls -	10 grains	20 grains
Garic, cloves of -	No. 2.	No. 6.
Gentian -	20 grains	40 grains
Germander -	15 grains	1 drachm
Ginger -	15 grains	20 grains
Ginſeng -	20 grains	30 grains
Guaiacum, gum-reſin -	20 grains	30 grains
Gum arabic -	15 grains	1 drachm
gambouge -	4 grains	12 grains

H.

Hartſhorn, prepared -	20 grains	1 drachm
ſpirits of -	20 drops	40 drops
cauſtic, in ſome mucilaginous vehicle -	5 drops	25 drops
ſalt of -	4 grains	12 grains
Hellebore, white -	1 grain	5 grains
black -	5 grains	10 grains
Hemlock ſhould be begun in very ſmall doſes of one grain or leſs, and gradually increaſed as the conſtitution will bear.		
Hiera picra -	10 grains	20 grains
Honey of ſquills -	20 grains	40 grains
of roſes -	1 drachm	2 drachms
Hoffman's anodyne liquor	20 drops	60 drops

I.

Jalap, powder -	10 grains	40 grains
Infuſion of gentian compound	1 ounce	3 ounces

Infuſion of roſes	from	4 ounces	to	8 ounces
ſenna	-	half oz.		2 ounces
Ipecacuanha	-	10 grains		30 grains
Iron, ruſt of	-	15 grains		20 grains
ammoniated	-	4 grains		10 grains
tartariſed	-	4 grains		10 grains
ſalt of	-	1 grain		5 grains
Juniper, powder of the berries		20 grains		1 drachm

K.

Kino, gum	-	10 grains	30 grains
Kermes, juice of	-	1 drachm	3 drachms

L.

Lichen, aſh-coloured, ground		10 grains	40 grains
Icelandic, a ſtrong de-			
coction of	-	2 ounces	4 ounces
Lime-water	-	4 ounces	8 ounces
Lixivium of tartar	-	25 drops	40 drops
Linſeed, an infuſion of one ounce to a quart of water.			

M.

Madder powder	-	half drac.	1 drachm
Mace	-	10 grains	20 grains
Magneſia	-	1 drachm	2 drachm
calcined	-	———	———
Manna	-	1 ounce	2 ounces
Maſtic, gum	-	10 grains	30 grains
Mercury, crude	-	half oz.	4 ounces
calcined	-	half grain	2 grains
with chalk	-	10 grains	30 grains
corroſive ſublimate		⅛ grain	half grain
cinnabar of	-	10 grains	30 grains
yellow emetic, as ſter-			
nutory	-	1 grain	3 grains
Mezereon, decoction, to a pint of water	-	———	2 drachms
Millipedes	-	20 grains	2 drachms
Muſk	-	15 grains	40 grains
Muſtard ſeed	-	2 drachms	1 ounce
Myrrh, gum	-	10 grains	1 drachm

N.

Nitre, purified	-	20 grains	30 grains
Nutmeg	-	6 grains	half drachm

O.

Oil of almonds	from	half ounce	to	1 ounce
linſeed	-	——		——
caſtor	-	2 drachm		1 ounce
Olibanum	-	15 grains		30 grains
Onion, expreſſed juice of	-	half an oz.		2 ounces
Opium	-	half grain	-	2 grains
Opoponax	-	10 grains		30 grains
Oxymel of colchicum	-	1 drachm		1 ounce
ſquills	-	1 drachm		2 drachm

P.

Petroleum -	10 drops	30 drops
Pills, aloetic -	20 grains	30 grains
of the gums -	20 grains	30 grains
mercurial -	10 grains	20 grains
Pomegranate, powder of -	20 grains	1 drachm
Powder, antimonial -	3 grains	6 grains
of contrayerva, compound	15 grains	30 grains
of chalk, compound	20 grains	40 grains
with opium	10 grains	40 grains
of ipecacuanha, compound, or Dover's powder	10 grains	30 grains

Q.

Quaſſia -	15 grains	30 grain
Two drachms to a pint of water for a decoction.		
Quince ſeeds, mucilage of, at pleaſure.		

R.

Rhubarb, powder -	20 grains	40 grains
Reſin, yellow -	10 grains	20 grains
Rue powder -	20 grains	40 grains

S.

St. John's wort -	20 grains	1 drachm
Saffron -	15 grains	20 grains
Sagapenum -	20 grains	30 grains
Sal ammoniac -	20 grains	30 grains
Salt, Epſom -	2 drachms	half ounce
Glauber -	4 drachms	2 ounces
polychreſt -	20 grains	half ounce
of tartar -	20 grains	30 grains

Sarſaparilla, powder of	from	20 grains	to 40 grains
Scammony	-	5 grains	10 grains
Seneka	-	20 grains	40 grains
Senna	-	20 grains	40 grains
Soap	-	20 grains	half oz.
lees	-	20 drops	30 drops
Scurvy graſs, expreſſed juice		2 ounces	4 ounces
Snake root	-	20 grains	40 grains
Sorrel, juice of, depurated	-	4 ounces	8 ounces
Spirit of Mindererus	-	2 drachms	1 ounce
ſweet, of vitriol	-	20 drops	40 drops
nitre	-	20 drops	40 drops
of ſal ammoniac	-	20 drops	40 drops
compound	-	———	———
foetid	-	———	———
Spirits, diſtilled	-	1 drachm	half oz.
Spermacet	-	20 grains	1 drachm
Sponge, burned	-	20 grains	1 drachm
Sulphur, flowers of	-	20 grains	1 drachm
precipitated, of antimony		2 grains	4 grains
Squill, dried powder	-	2 grains	3 grains
freſh	-	5 grains	15 grains
Syrup of poppies	-	1 drachm	half oz.
buckthorn	-	1 drachm	2 drachms
ginger	-	1 drachm	half oz.
Syrups in general	-	1 drachm	2 drachms

T.

Tar water. A pint daily.			
Tartar, cream of	-	2 drachms	1 ounce
regenerated	-	20 grains	1 drachm
ſoluble	-	2 drachms	1 ounce
emetic, alterative	-	$\frac{1}{8}$ grains	half a grain
as emetic	-	1 grain	3 grains
Terra japonica	-	20 grains	40 grains
Tobacco, an infuſion of, 1 drachm to a pint of water; ſhould be adminiſtered by table ſpoonfuls.			
Tin, powder of	-	20 grains	1 drachm
Turmeric	-	20 grains	1 drachm
Turpentine, ſpirits of	-	10 drops	30 drops
Tincture of aloes	-	half oz.	1 ounce
compound	-	1 drachm	2 drachms
aſaſtœtida	-	1 drachm	2 drachms
benzoin, compound		10 drops	40 drops

Tincture of cantharides	from	10 drops	to 40 drops
cardamoms	-	1 drachm	half oz.
caſtor	-	half drachm	1 ½ drachm
cathecu	-	1 drachm	2 drachms
Peruvian bark	-	2 drachms	half oz.
iron, muriated	-	10 drops	60 drops
columbo	-	2 drachms	3 drachms
gentian, compound		2 drachms	3 drachms
guaiacum volatile	-	2 drachms	3 drachms
black helebore	-	2 ſcruples	1 drachm
jalap	-	2 drachms	half oz.
lavender, compound		20 drops	2 drachms
myrrh	-	1 ſcruple	1 drachm
opium	-	10 drops	40 drops
camphorated, or paregoric elixir	-	1 drachm	3 drachms
rhubarb	-	1 ounce	2 ounces
ſenna	-	2 drachms	1 ounce
ſnake-root	-	1 drachm	2 drachms
valerian	-	1 drachm	3 drachms
volatile	-	1 drachm	2 drachms
Tormentil, powder of	-	10 grains	1 drachm

V.

Valerian, powder of	-	20 grains	2 drachms
Vinegar, diſtilled	-	2 drachms	1 ounce
of ſquills	-	10 drops	50 drops
as emetic	-	half oz.	1 ounce
Verdigris, violent emetic	-	1 grain	2 grains
Vitriol, white, as a tonic	-	2 grains	5 grains
as a quickly operating emetic	-	20 grains	1 drachm
blue, emetic	-	1 grain	3 grains
Uva urſi, in powder	-	20 grains	1 drachm

W.

Water creſs, expreſſed juice	1 ounce	2 ounces
Water, the ſimple diſtilled may generally be given -	1 ounce	3 or 4 oz.
Wormwood, expreſſed juice	1 ounce	2 ounces
White lead -	1 grain	3 grains
Wine, aloetic -	half oz.	1 ounce
antimonial -	20 drops	2 drachms
ipecauanha -	2 drachms	1 ½ ounce
rhubarb -	1 ounce	2 ounces

A

GLOSSARY.

ALTHOUGH terms of art have been ſedulouſly avoided in the compoſition of this treatiſe, it is impoſſible entirely to baniſh technical phraſes when writing on medicine; a ſcience that has been leſs generally attended to by mankind, and continues therefore to be more infected with the jargon of the ſchools, than perhaps any other. Several perſons having expreſſed their opinion that a Gloſſary would make this work more generally intelligible, the following conciſe explanation of the few terms of art that occur, has been added in compliance with their ſentiments, and to fulfil the original intention of this treatiſe, by rendering it intelligible and uſeful to all ranks and claſſes of mankind.

A.

Abdomen. The belly.

Abſorbents. Veſſels that convey the nouriſhment from the inteſtines, and the ſecreted fluids, from the various cavities into the maſs of blood.

Acrimony. Corroſive ſharpneſs.

Acute. A diſeaſe, the ſymptoms of which are violent, and tend to a ſpeedy termination, is called acute.

Adult. Of mature age.

Aduſt. Dry, warm.

Antiſpaſmodic. Whatever tends to prevent or remove ſpaſm.

Aphthæ. Small whitiſh ulcers appearing in the mouth.

Aſtriction. A tightening, or leſſening.

Atrabilarian. An epithet commonly applied to people of a certain temperament, marked by a dark complexion, black hair, ſpare habit, &c. which the antients ſuppoſed to ariſe from the *atra biles*, or the black bile.

B.

Bile or *Gall.* A fluid which is ſecreted by the liver into the gall-bladder, and from thence paſſes into the inteſtines, in order to promote digeſtion.

C.

Cacochymie. An unhealthy ſtate of the body.

Caries. A rottenneſs of the bone.

Chyle. A milky fluid ſeparated from the aliment in the inteſtines, and conveyed by the abſorbents into the blood to ſupply the waſte of the animal body.

Chronic. A diſeaſe whole progreſs is ſlow, in oppoſition to acute.

Circulation. The motion of the blood, which is driven by the heart through the arteries, and returns by the veins.

Comatoſe. Sleepy.

Conglobate Gland. A ſingle gland.

Conglomerate. A compound gland.

Contagion. Infectious matter.

Cutis. The ſkin.

Cutaneous. Of or belonging to the ſkin.

Criſis. A certain period in the progreſs of a diſeaſe, from whence a decided alteration either for the better or the worſe takes palce.

Critical. Deciſive or important.

Critical Days. The fourth, fifth, and ſeventh, ninth, eleventh, thirteenth, fourteenth, ſeventeenth, and twenty-firſt, are by ſome authors denominated critical days, becauſe febrile complaints have been obſerved to take a deciſive change at theſe periods.

D.

Debility. Weakneſs.

Delirium. A temporary diſorder of the mental faculties.

Diaphragm. A membrane ſeparating the cavity of the cheſt from that of the belly.

Diuretic. A medicine that promotes the ſecretion of urine.

Draſtic. Is applied to ſuch purgative medicine as are violent or harſh in their operation.

E.

Empyema. A collection of purulent matter in the cavity of the breaſt.

Endemic. A diſeaſe peculiar to a certain diſtrict of country.

Epidemic. A diſeaſe generally infectious.

Exacerbation. The increaſe of any diſeaſe.

F.

Fœces. Excrements.

Fœtid. Emiting an offenſive ſmell.

Fœtus. The child before birth, or when born before the proper period, is thus termed.

Flatulent. Producing wind.

Fungus. Proud fleſh.

G.

Gangrene. Mortification.

Gummata. *Ganglia.* } Veneral excreſcences.

Gymnaſtic. Exerciſe taken with a view to preſerve or reſtore health.—The ancient phyſicians reckoned this an important branch of medicine.

H.

Hectic Fever. A ſlow conſuming fever, generally attending a bad habit of body, or ſome incurable and deep rooted diſeaſe.

Hæmorrhoids. The piles.

Hæmorrhage. Diſcharge of blood.

Hypochondriaciſm. Low ſpirits.

Hypochondriac viſcera. The liver, ſpleen, &c. ſo termed from their ſituation in the hypochondria or upper and lateral parts of the belly.

I.

Ichor. Thin bad matter.

Impoſthume. A collection of purulent matter.

Inflammation. A ſurcharge of blood, and an increaſed action of the veſſels, in any particular part of the body.

L.

Ligature. Bandage.

Lixivium. Ley.

M.

Miliary Eruption. Eruption of ſmall puſtules reſembling the ſeeds of millet.

Morbific. Cauſing diſeaſe, or diſeaſed.

Mucus. The matter diſcharged from the noſe, lungs, &c.

Myſentery. A double membrance which connects the inteſtines to the back bone.

N.

Nervous. Irritable.

Nauſea. An inclination to vomit.

Nodes. Enlargement of the bones produced by the venereal diſeaſe.

P.

Pectoral. Medicines adapted to cure diſeaſes of the breaſt.

Pelvis. The bones ſituated at the lower part of the trunk; thus named from their reſembling in ſome meaſure a baſon.

Peritoneum. A membrane lining the cavity of the belly, and covering the inteſtines.
Pericardium. A membrane lining the cavity of the heart.
Perſpiration. The matter diſcharged from the pores of the ſkin in form of vapour or ſweat.
Phlogiston. Is here uſed to ſignify ſomewhat rendering the air unfit for the purpoſes of reſpiration.
Phlegmatic. Watery, relaxed.
Plethoric. Replete with blood.
Polypus. A diſeaſed excreſcence, or the ſubſtance formed of coagulable lymph, frequently found in the large blood veſſels.
Pus. Matter contained in the boil.

R.

Regimen. Regulation of diet.
Rectum. The ſtraight gut in which the fæces are contained.
Reſpiration. The act of breathing.

S.

Saliva. The fluid ſecreted by the glands of the mouth.
Sanies. A thin bad matter, diſcharged from an ill-conditioned ſore.
Schirrhous. A ſtate of diſeaſed hardneſs.
Slough. A part ſeparated and thrown off by ſuppuration.
Spaſm. A diſeaſed contraction.
Spine. The back bone.
Styptic. A medicine for ſtopping the diſcharge of blood.
Syncope. A fainting fit, attended with a complete abolition of ſenſation and thought.

T.

Tabes. A ſpecies of conſumption.
Temperament. A peculiar habit of body, of which there are generally reckoned four, viz. the ſanguine, the bilious, the melancholic, and the phlegmatic.

U.

Vertigo. Giddineſs.
Ulcer. An ill-conditioned ſore.
Ureters. Two long and ſmall canals which convey the urine from the kidneys to the bladder.
Urethra. The canal which conveys the urine from the bladder.

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